Record of the Class of 1878

'78-'98

of the University of Pennsylvania

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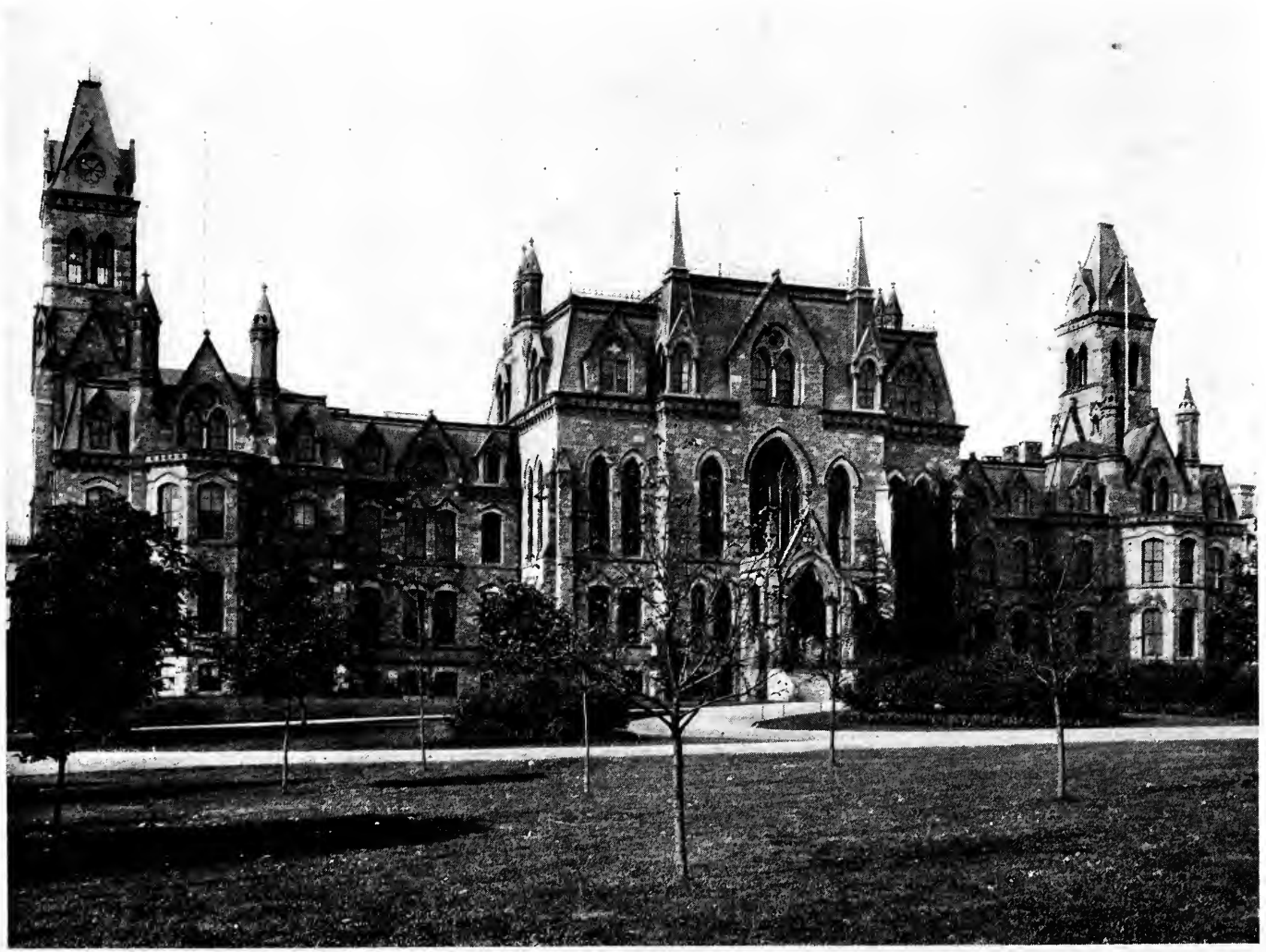

COLLEGE HALL

A RECORD

OF THE

Class of 1878

OF

The College

UNIVERSITY OF PENNSYLVANIA

1878 to 1898

PHILADELPHIA
1899

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The University since 1878

THE growth of a university cannot properly be measured by a consideration of its material expansion alone, nor would a regard for its elevation in standards of instruction and education only give a much more adequate conception of its real development. Nevertheless, in some degree the one is the outward expression of the other. Higher standards of education mean added facilities for instruction, increase in buildings and equipment and in the corps of professors and instructors, while the demands of modern science require the establishment of new schools and the division and sub-division of old departments of study into new and separate ones under independent faculties; so that it may be said that a university cannot be great in achievement, in character, and that sincerity of purpose which aims at the highest ideals without evidencing it in some measure in its visible self.

A fairly adequate conception of the growth of the University of Pennsylvania during the past twenty years may therefore be had by a consideration of her material accretions during that period, with such reference to the requirements of study and character of instruction as may be possible in a brief sketch.

When the class of 1878 was graduated the land in West Philadelphia belonging to the University, available for campus and buildings, consisted of fifteen and one-half acres. By the acquisition of land situated immediately adjacent thereto the original holding has been increased to fifty-two and one-half acres. The Pennsylvania Railroad touching it at South Street

Station, five minutes from the Broad Street Terminal, and the trolley cars on two sides, twelve minutes from Broad and Walnut Streets, make this site, with respect to situation near the centre of a great city and to facilities for railroad and river transportation, the most valuable university property in this country.

Three buildings—College Hall, Medical Hall, and the University Hospital—were the only structures upon the campus in 1878. Twenty-five buildings have since been added, of which the most important are:

	Erected.	Cost.
Medical Laboratory	1879	$70,000
The Gibson Wing of the Hospital	1882	65,000
Biological Hall	1884	40,000
Veterinary Hall	1884	40,000
Library Building	1891	210,000
Laboratory of Hygiene	1892	60,000
Mechanical Engineering Building and Central Heat and Light Station	1892	186,000
Wistar Institute of Anatomy and Biology	1893	265,000
John Harrison Laboratory of Chemistry	1894	120,000
Dormitories	1896	380,000
Henry Howard Houston Hall	1896	160,000
The Agnew Memorial Surgical Pavilion	1897	175,000
The William Pepper Laboratory	1897	25,000
Dental Hall	1897	154,000
Museum of Archæology and Paleontology, West Wing (nearly complete)	1899	400,000

An Astronomical Observatory has also been erected, at a cost of fifty thousand dollars, on the Flower Farm, also University property, situated about two miles from the city limits, on the West Chester Pike.

In addition to the buildings already completed and in process of erection, plans are being prepared for a Physical Laboratory,

to cost three hundred thousand dollars, and for a Chemical Laboratory for the use of the Medical School, to cost a like sum. It is also proposed to extend the Dormitories in the immediate future, and a Committee of Alumni has been appointed to raise the sum of sixty thousand dollars for the erection of a Central Tower and Gate-way, to constitute the main entrance to the "Quad" which will be formed when the Dormitories are completed. This arch is to be dedicated in perpetual commemoration of the services of the undergraduates and alumni who took part in the recent war with Spain.

Ground has also been broken for the new Law School at the corner of Thirty-fourth and Chestnut Streets. This department of the University, which, in 1878, delivered its lectures in the one room assigned to it in College Hall, will, upon the completion of the new structure, possess the finest law-school building in the world, with accommodations for five hundred and thirty students and one of the largest law-school libraries in this country.

In 1878 the teaching force of the University consisted of ninety-five professors, instructors, and lecturers; in 1898 it had increased to two hundred and fifty-eight.

The increase in students during this period appears by the following table:

	In 1878.	In 1898.	Increase.
The College and Department of Philosophy	264	1093	829
Department of Medicine and Hygiene	511	953	442
Department of Law	103	360	257
Department of Dentistry		432	432
Department of Veterinary Medicine		48	48
Total Matriculations	878	2886	2008
Deduct duplicate Matriculations	63	52	
	815	2834	
Increase in Students			2019

New departments have been added as follows:

The Department of Philosophy (Graduate School).
The Department of Dentistry.
The Department of Veterinary Medicine.
The Department of Physical Education.
The Department of Archæology and Paleontology.
The Wistar Institute of Anatomy and Biology (for post-graduate and advanced work).
The Flower Astronomical Observatory.
The Laboratory of Hygiene.

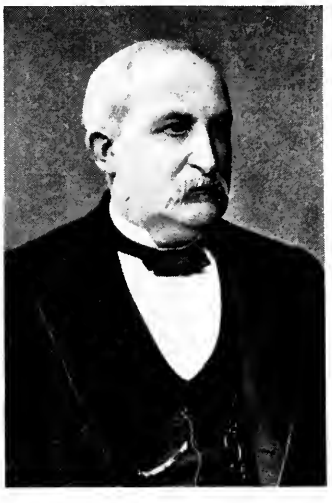
In the College have been added:

The Course in Finance and Economy (Wharton School).
The Course in Biology.
The Courses in Architecture and Interior Decoration.
The Course in Chemical Engineering.
The Course in Electrical Engineering.

With the growth of the University in material prosperity and dignity the standard of scholarship has kept pace. This is indicated, among other ways, by the increased requirements for admission in all departments. In the College the Faculty has adopted for entrance requirements the recommendations of a conference held in New York, in 1896, between representatives of the Universities of Harvard, Yale, Columbia, Cornell, Princeton, and Pennsylvania; an action which, it may be noted, has not been generally taken by the other colleges recommending the increased requirements.

The examinations for entrance in the professional schools, which in 1878 required no examination whatever upon admission, have steadily advanced in severity since their inauguration, and in 1899 the requirements for admission to the Law and Medical

Schools will be the same as those announced for candidates for the Freshman Class in the College. That the insistence upon a high standard of preparation will attract the best students is shown by the fact that in the Law School over sixty per cent. of those entering the present Freshman Class are college graduates, and that out of two hundred and thirteen who entered as new students in the last Freshman Class of the Medical School over fifty per cent. were graduates of colleges or approved high and normal schools and academies.



The Medical School, which in 1878 had just increased its course from two years to three years, with annual sessions of five months, now demands four years' work, with annual sessions of eight months. The course in the Law School has also been extended from two years to three years, with sessions of eight months, as have the courses in the School of Dentistry and Veterinary Medicine.

Dr. Stillé resigned the office of Provost in 1880, the provostship then remaining vacant until February 22, 1881, when Dr. William Pepper was publicly inaugurated as his successor. Dr. Pepper remained in office as Provost until Commencement Day, 1894, when he resigned. Mr. Charles Custis Harrison then became acting Provost, declining to accept the full title until a year later, in 1895.

Under Provost Stillé the preparation for the years of expansion was made. Through his foresight and efforts the College and the Schools of Medicine and Law, which at the time consti-

tuted the University, moved from the lot of ground on Ninth Street, between Market and Chestnut Streets, which they had occupied since 1802, to their present location. This change was made because of the conviction in the mind of the then Provost that the time was fast approaching when the University would require space for material growth. Through his efforts this land was secured, large sums of money were contributed towards the work of the University, the Hospital was built, and, most important of all, a new spirit awakened and a realization of its possible future secured to the University. Upon this foundation Dr. Pepper, Dr. Stillé's successor, built. The period of his administration was one of extraordinary growth. Not only were the accretions in money, buildings, and land remarkable and the increase in teaching force and number of students notable, but in advances, which were contemporary with the spirit of the time, the University also progressed. The City was brought into relationship with the University by the establishment of fifty free scholarships; women were admitted to the Board of Managers of the Hospital and a department for their Graduate Work opened; the Society for the Extension of University Teaching and the University Lecture Association were founded and the Dormitory Principle was adopted. Fourteen schools or departments were established, thirteen buildings were erected, courses were extended, and the work in every department of the University stimulated.

With Provost Harrison's succession came a continuance of

the work on the lines laid down by his two predecessors and an adventuring upon those conceived by himself. The material welfare of the University having been so well secured, Provost Harrison devoted himself especially to its educational development. One of his first acts was the gift of five hundred thousand dollars for the establishment of the George Leib Harrison Fund. The annual income of this money supports eight graduate scholarships, fourteen fellowships, and five senior fellowships, for work in the higher branches of the arts and sciences. Mr. Harrison has undertaken to secure for the University an endowment fund of five million dollars, to which large contributions have already been made.

Chas. C. Harrison

The erection of the Observatory and the creation of the Flower Professorship of Astronomy mark another step in the growth of the University under its present management. The erection of Dental Hall, of the Dormitory Buildings, of the first wing of the great Museum of Archæology and Paleontology, with its adjoining public park and Botanic Garden, and the commencement of a building for the Law School mark the carrying out of cherished plans of long standing, but the securing to the students of Houston Hall marks a new era. The mental care of its students has long been the recognized and accomplished duty of all universities; the physical care of its students has lately been assumed by the University of Pennsylvania with the opening of its dormitories; but Houston Hall is the first step at any university towards the social care of its undergraduates. A

complete story of Houston Hall's origin and purpose is given elsewhere in this volume in the Provost's own words.

This sketch would be incomplete without reference to the work of the undergraduates, during the last twenty years, in athletics. In 1883 the Trustees of the University authorized the Athletic Association to lay out and maintain an athletic field at the corner of Thirty-seventh and Spruce Streets. This field was used until 1895, when the Trustees decided to erect dormitories upon it, and in its stead set apart for the use of the Athletic Association a new and much larger tract of land at the corner of Thirty-third and Spruce Streets, now known as Franklin Field.

For several years Pennsylvania has won the intercollegiate championship in track and field athletics in competition with Yale, Harvard, Princeton, Cornell, and a number of other representative American colleges and universities. In June, 1898, she became the champion in intercollegiate rowing by defeating, in record time, the Cornell eight, after the latter had been successful, a week before, in defeating Yale and Harvard. In foot-ball for the past five years she has been in the front rank. Princeton was defeated in 1892, and again in 1894, since which time no games have been played between Pennsylvania and Princeton. Harvard was defeated in four successive years, from 1894 to 1897, Pennsylvania, however, losing to her in the fall of 1898. In base-ball and in cricket the University is well represented, maintaining a high standard of excellence in both of these branches of sport.

Within the last ten years Faculty supervision of athletics has been inaugurated and carried out with great benefit to the best interests of the athletic life of the University. No student is

permitted to take part in any branch of athletics unless he is in good standing in his university work, and shall first satisfy the authorities that he is free from taint of athletic professionalism. In the formulation and faithful carrying out of rules and regulations covering the honest and honorable management of athletics, Pennsylvania is a leading and influential spirit among the colleges of the country. The success which representatives of Pennsylvania have had in their athletic contests with other colleges has been the means, by arousing throughout the whole University a common interest and enthusiasm, of creating a strong university feeling, which has obliterated all factional lines between the several departments.

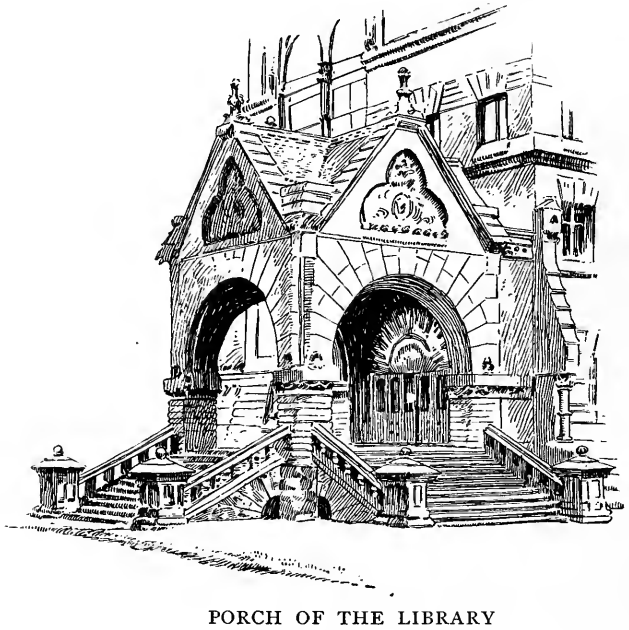
Other factors have been, however, scarcely less potent in ministering to the growth of this spirit. Houston Hall, with its daily attendance of over twelve hundred students, has brought about a commingling of men from all the departments of the University under conditions which encourage a wide range of acquaintanceship beyond the ordinary boundaries of class- and lecture-room ; and the dormitories have contributed, in the same way, their share of influence to this end.

The University's dramatic club,—the Mask and Wig,—which has been in existence since 1889 and gives its yearly production during Easter week, draws for its membership and cast from the whole body of the students, as do the various musical clubs. The large number of Greek letter fraternities, moreover, which maintain organizations at the University bring into intimate relationship their quota of men from all departments.

Many other student organizations have sprung into existence since the erection of Houston Hall and the Dormitories, whose membership is entirely independent of departmental lines, and

within which one may find college, medical, and law men gathering together upon common ground and with a common interest apart from their academic duties.

All of these influences have combined to create a live and forceful activity in the social life of the University, affecting professors and students alike, and promising for the future a still greater development of that strong and persistent Pennsylvania individuality which already dominates to an appreciable extent the community which has come under its influence.



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The Class Organization since Graduation

THE last meeting of the Class of 1878, before graduation, was held on May 15, 1878. From 1878 until 1887 there were no meetings; but in the fall of the latter year certain members of the Class, feeling that the organization should be revived, issued a circular calling for a preliminary gathering, to be held at the house of Mr. Helme, in Philadelphia, on November 16.

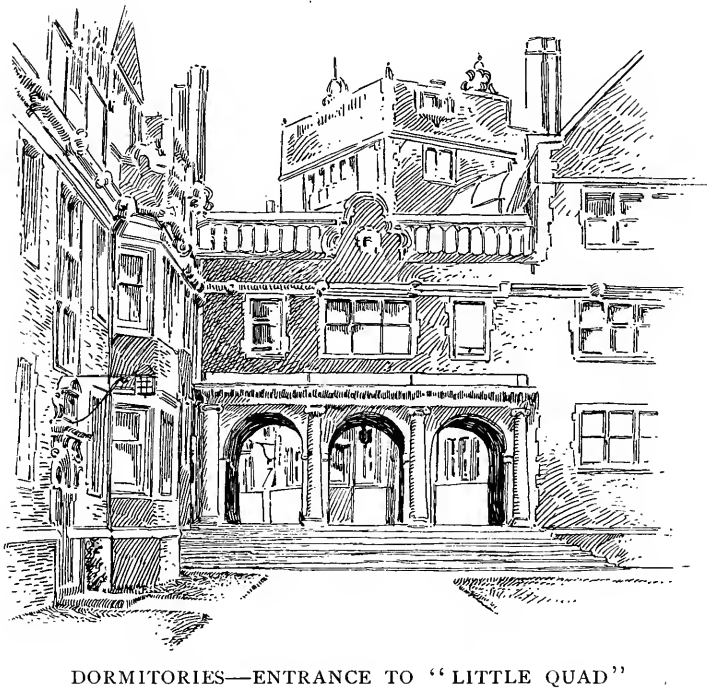
Eighteen men were present on this occasion. Mr. Norris was chosen chairman. It was resolved to call a meeting to perfect a permanent organization and to have a banquet in commemoration of the tenth anniversary of graduation. The following committee was appointed to make arrangements: Messrs. Norris, McCollin, Helme, Rudderow, Murphy, and Hall.

The meeting was held on the evening of January 31, 1888, at the Hotel Bellevue, Philadelphia, and was followed by a banquet. There were twenty-two members of the Class present. Mr. d'Invilliers was elected President, Mr. Hoffman Vice-President, and Mr. Rudderow Secretary. It was voted to have an annual meeting on the last day of January of each year.

At the annual meeting of January 31, 1889, by-laws were adopted; the officers being a President, a Vice-President, and a Secretary-Treasurer. In 1893 the date of the annual meeting was changed to the third Thursday in January.

Messrs. d'Invilliers and Hoffman have been President and Vice-President respectively since the reorganization of the Class,

and Mr. Rudderow was the Secretary-Treasurer for the first nine years. Mr. Church was elected Secretary-Treasurer in 1897. All the annual meetings have been held in Philadelphia, and all at the University Club except that of 1888, which was held at the Hotel Bellevue, and that of 1898, at the Hotel Stenton. The membership of the organization is now forty-eight.



DORMITORIES—ENTRANCE TO "LITTLE QUAD"

The Class

President

EDWARD VINCENT D'INVILLIERS

Vice-President

JOSIAH OGDEN HOFFMAN

Secretary-Treasurer

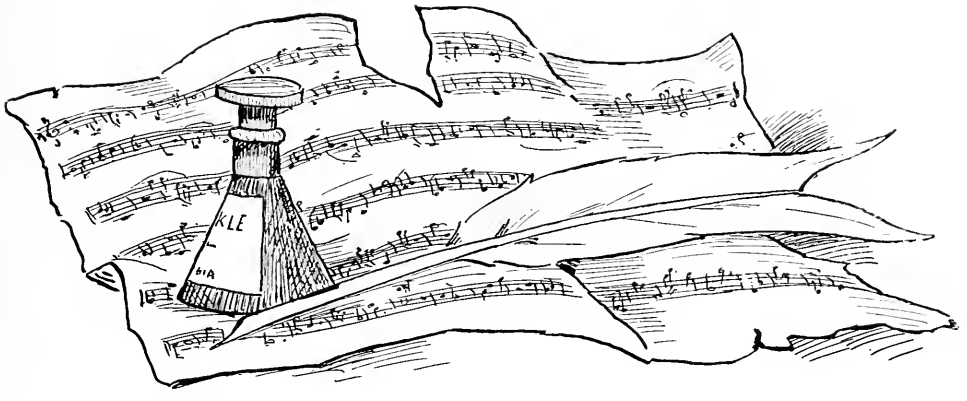
ARTHUR LATHAM CHURCH

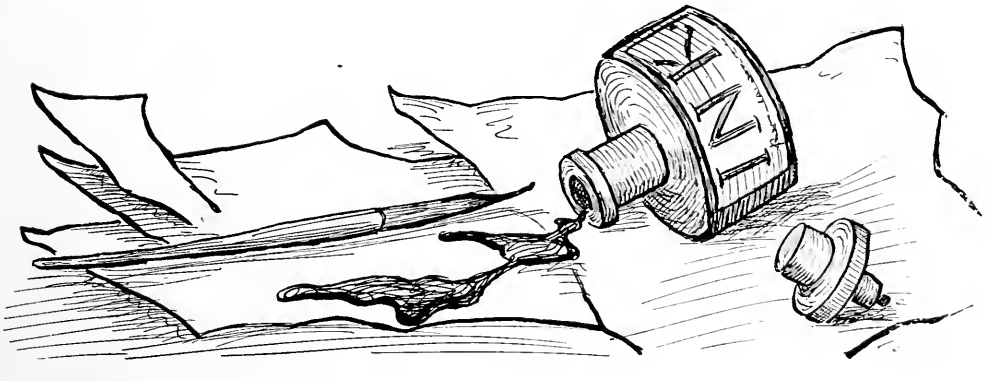
Matriculates

HENRY BLACKWELL BARTOW
WILLIAM MURPHY BENERMAN
RUFUS HOWARD BENT
WILLIAM SERGEANT BLIGHT, JR.
WILLIAM PRATT BREED, JR.
GEORGE ETHAN BROOKS
EDWARD SWIFT BUCKLEY, JR.
WILLIAM ANTHONY BULLOCK
WASHINGTON ATLEE BURPEE
LAURIN WHITING BURTON
JOHN CASSIN
ARTHUR LATHAM CHURCH
CLARENCE MUNROE CLARK
HERMAN CLARKE
WILLIAM GREENE COCHRAN
JAMES CLARK CORRY
WILSON DARLING CRAIG
JAMES CHALICE CRAVEN
JOHN PRICE CROZER
EDWARD VINCENT D'INVILLIERS
GERTRUDE KLEIN PEIRCE EASBY
WILLIAM PATTEN ELWELL
ANNA LOCKHART FLANIGEN
CHARLES PEMBERTON FOX
GEORGE CUTHBERT GILLESPIE
JOHN GRAHAM
WILLIAM HENRY GRANT
CLIFFORD PREVOST GRAYSON
WALTER FERDINAND HALL
FREDERICK FRALEY HALLOWELL
WILLIAM JOHNS HARKNESS
ALAN HALE HARRIS
HENRY REED HATFIELD
REUBEN AUGUSTUS HEATON
WILLIAM EDWARD HELME
CHARLES PHILIP HENRY
JOSIAH OGDEN HOFFMAN
HENRY HOWARD HOUSTON, JR.
CHARLES BENDER HURLEY
HENRY ATLEE INGRAM

Record of the Class of 1878, University of Pennsylvania

William Hemphill Ingram
William Archer Irving
Henry Scott Jefferys
William Norton Johnson
Clarence Kennedy
Henry Martyn Kneedler
Joseph Jones Knowles
Pedro Pascual Perfecto Lacoste
Frederick Humphreville Lewis
Horace Cooper Lex
Joshua Bertram Lippincott
William Kilbreth Lowrey
Henry Grattan McCarter
Edward Garrett McCollin
Michael McCue
Harry McDowell
Edward Shippen McIlvaine
Henry Albert MacKubbin
Samuel Augustus Martin
Charles Frederick Moore
John Hassinger Murphy
William Henry Norris
John Curtis Patterson
Thomas Barclay Prichett
Charles Fithian Reeves
James Renwick Rodgers
William Lee Rowland
Augustus Janney Rudderow
Stephen Fotterall Russell
Charles Alfred Rutter
John Morin Scott
Richard Bowden Shepherd
Isaac Scott Smyth, Jr.
William Henry Stetler
John Alexander Teaz
Augustus Thouron
Thomas Earle White
Nelson Oliver Whitney

Total, 78

Class Sketches



AT THE IVY BALL

HENRY BLACKWELL BARTOW

Certificate of Proficiency (Arts), LL.B.

BARTOW entered the Freshman Class, Department of Arts, in 1874, as a partial student, receiving a Certificate of Proficiency in 1878. Afterwards he entered the Law School of the University, and was graduated therefrom in 1881, since which time he has practised law in Philadelphia. He is now and has been for some years trust officer of the Northern Saving Fund Safe Deposit and Trust Company of Philadelphia.

He has been active in the affairs of both Church and State, having acted as secretary of the vestry of St. Andrew's Protestant Episcopal Church since 1896, and as chairman of the Eighth Ward Republican Executive Committee in 1887 and 1888.

Bartow is an active member of the Law Academy of Philadelphia, having served in 1885 as secretary, in 1886 as vice-president, and in 1888 as president of that organization. He is also a member of the Pennsylvania Society of the Sons of the Revolution, of the Germantown Cricket Club, and of the Philadelphia Cricket Club. He is a member of the Phi Kappa Sigma Fraternity.

Bartow has contributed a number of articles to the "American and English Encyclopædia of Law" (first edition). The articles on Assignments, Banks and Banking, Checks, and Contribution in this Encyclopædia are from his pen. He has also acted as librarian of the Hirst Free Law Library.

Born August 4, 1858, Bristol, Pennsylvania; parents, Rev. Henry Blackwell Bartow and Mary Welsh Phillips. Residence, No. 2107 De Lancey Place, Philadelphia; business address, southwest corner of Sixth and Spring Garden Streets, Philadelphia.

WILLIAM MURPHY BENERMAN

BENERMAN entered the Scientific Department as a Freshman in 1874, and left College at the close of his Sophomore Year, since which time he has followed the occupation of stock-broker in the city of Philadelphia.

He is a member of the Union League and of the Athletic Club of the Schuylkill Navy. He has been interested in boating, having been captain of the West Philadelphia Boat Club from 1886 to 1890, and vice-commodore of the Schuylkill Navy from 1890 to 1892.

Born December 11, 1858, Philadelphia, Pennsylvania; parents, Michael Fields Benerman and Louisa L. Bilderback; married, November 26, 1884, Viola Watkins; children, Watkins and Dorothy. Residence, No. 7308 Boyer Street, Mt. Airy, Philadelphia; business address, No. 304 Chestnut Street, Philadelphia.

RUFUS HOWARD BENT

A.B.

BENT entered the Freshman Class in 1874 as a student in the Department of Arts. After graduation he studied at the Union Theological Seminary in New York City during 1878 and 1879, and afterwards at the Princeton Theological Seminary, being graduated from the latter in 1881. Subsequently he became pastor of the Presbyterian Church at Edge Hill, Pennsylvania, and later removed to Cedarville, New Jersey. On March 20, 1893, he was appointed a foreign missionary under the care of the Board of Foreign Missions of the Presbyterian Church, and is at present enrolled as a member of the Presbytery of Chinan (Synod of China, Northern), with head-quarters at Chining-Chow, China, a city of about two hundred thousand inhabitants.

Born, September 23, 1850, at Parkesburg, Chester County, Pennsylvania; parents, David J. Bent and Emeline M. Armstrong; married in China, on April 2, 1896, Miss Sarah A. Poindexter, M.D., also a missionary; child, Fanny, born July 29, 1898. Address, care of Foreign Missions, Chining-Chow, China.

WILLIAM SERGEANT BLIGHT, JR.

A.B., LL.B., A.M.

BLIGHT entered College in 1874 as a Freshman in the Department of Arts. After leaving College he matriculated in the Law School of the University, and was graduated therefrom in 1880. He practised law in Philadelphia from 1880 to 1887. In the latter year he gave up the law and turned to the more congenial work of teaching, founding the Blight School, a preparatory school for boys, of which he is still the head.

Blight is a member of Delta Psi, of Phi Beta Kappa, and of the College Alumni Society.

Born, Philadelphia, March 7, 1858; parents, William Sergeant Blight (Class of 1846) and Sarah C. Penrose; married, December 5, 1890, Cornelia Taylor Blight (daughter of Isaac Oliver Blight, Class of 1850). Residence, No. 1412 Pine Street, Philadelphia; business address, No. 401 South Twenty-second Street, Philadelphia.

WILLIAM PRATT BREED, JR.

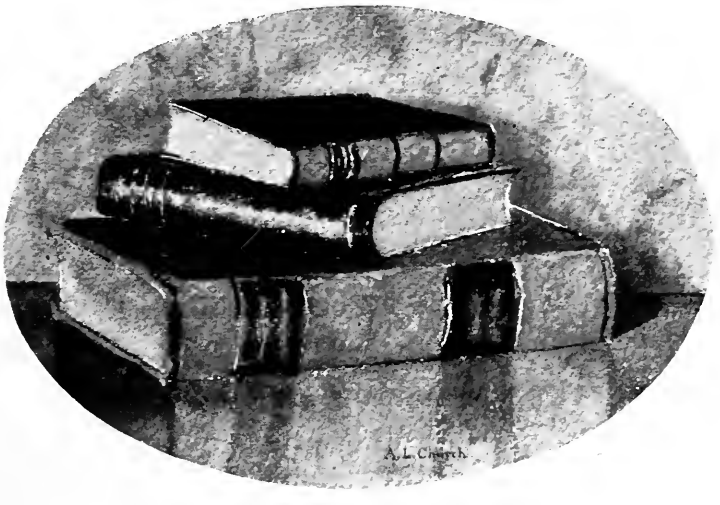
A.B.

BREED came into the Class as a Freshman, Department of Arts, in 1874. After graduation he spent several months of the year 1878 in Europe. On his return he entered the Princeton Theological Seminary, but, ill-health compelling him to lose a year of his course, he was not graduated from the Seminary until 1882. He spent his vacations from the Princeton Seminary in charge of a small church at Malden-on-the-Hudson. After graduation from Princeton, Breed took a post-graduate course at the Union Theological Seminary, New York City, and in 1883 accepted a call as pastor from the Fairview Presbyterian Church at Glen Moore, Pennsylvania, where he remained for seven years. On January 1, 1890, he went to the First Presbyterian Church at Milton, Pennsylvania, and was pastor there until his death, February 12, 1895.

Breed was a member of Phi Kappa Psi.

Born, Philadelphia, February 7, 1858; parents, Rev. William

Pratt Breed and Rebecca Sharp Murray; married, June 11, 1884, Georgiana C. Clark; children, Herbert Allen, born and died November 20, 1885, Ethel, born July 27, 1887, and Helen Murray, born March 5, 1892. Died at Tryon, North Carolina, February 12, 1895.



GEORGE ETHAN BROOKS

A.B., A.M., LL.B.

BROOKS matriculated in 1874 as a student in the Freshman Class, Department of Arts. After graduation from the College he took up the study of the law, entering the Class of 1882 of the Law School, from which he was graduated in course. Since that time he has pursued the practice of his profession in Philadelphia.

Born December 8, 1857; parents, George Brooks and Marilla Taylor. Residence, No. 1214 North Eighteenth Street, Philadelphia; business address, No. 625 Walnut Street, Philadelphia.

EDWARD SWIFT BUCKLEY, JR.

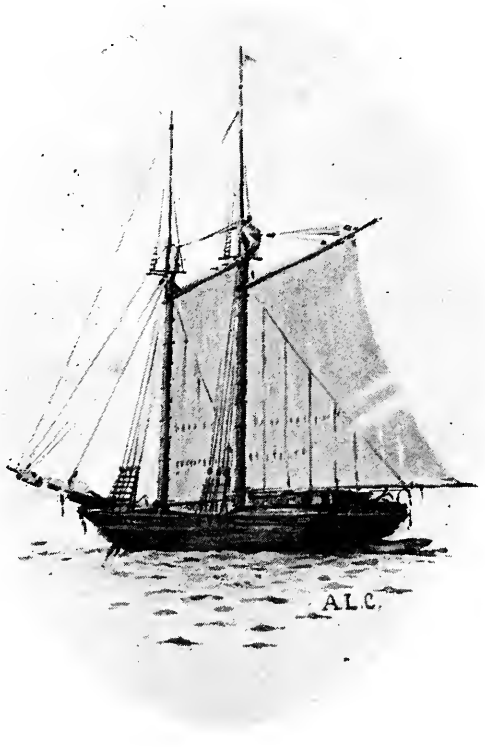
A.B., A.M.

BUCKLEY was admitted to the Freshman Class, Department of Arts, in 1874. After graduating he entered his father's business, the Gray's Ferry Iron Works, where he remained until 1888. From that time until recently he was out of active business, but lately accepted the position of president and treasurer of the Crum Lynne Iron and Steel Company.

Buckley is a member of Delta Psi, of the College Alumni Society, of the Philadelphia Cricket Club, of which he has been president since 1892, of the Aztec Club, University Club, and Germantown Cricket Club. He is also a member of the Academy of Natural Sciences, of the Board of Directors of the Pennsylvania Institute for the Deaf and Dumb, and of the Civil Service Reform Association, of which he is also a member of the Executive Committee. He is a member and director of the Church Club, and one of the Board of Directors of the Episcopal Academy of this city; of the Society for the Advancement of

Christianity in Pennsylvania, of the Protestant Episcopal Church, and of the Seamen's Mission of the Protestant Episcopal Church.

Born in Philadelphia, September 30, 1858; parents, Edward Swift Buckley and Katharine Watmough; married June 7, 1883, Charlotte Carter; child, Edward Swift, 3d. Residence, No. 2039 Sansom Street, Philadelphia; business address, No. 505 Chestnut Street, Philadelphia.



WILLIAM ANTHONY BULLOCK

A.B.

BULLOCK entered the Freshman Class in 1874 as a student in the Department of Arts. Since graduation he has been associated with his father, as a manufacturing chemist, in the firm of Bullock & Crenshaw, Philadelphia. He is a member of the College Alumni Society.

Born, Philadelphia, August 1, 1856; parents, Charles Bullock and Margaret C. Robinson; married, December 10, 1891, Josephine Shreve; children, Margaret Robinson, born March 15, 1893, died July 24, 1893, and Josephine, born April 27, 1894. Residence, No. 1017 Clinton Street, Philadelphia; business address, No. 528 Arch Street.

WASHINGTON ATLEE BURPEE

BURPEE matriculated in 1874, and was admitted to the Freshman Class, Department of Arts. He left College during the first term of his Sophomore Year, and shortly thereafter entered the Medical Department of the University, remaining there, however, but for one year. In 1876 he went into business as a seed merchant, founding the house of which he is the head. He has written and published several pamphlets on matters allied to his business. He is a member of the General Alumni Society, of the Union League, the Bachelors' Barge, the Art, and the University Clubs of Philadelphia; of the Arts, the Sphinx, and the Collie Clubs of New York; of the Royal Horticultural Society of London; and of the Société Nationale d'Horticulture of Paris.

Born, Sheffield, New Brunswick, April 5, 1858; parents, David Burpee and Ann Catharine Atlee; married, April 30, 1892, Blanche Simons; children, David, born April 5, 1893, and Washington Atlee, Jr., born October 25, 1894. Residence, No. 1332 Arch Street, Philadelphia; business address, Nos. 475 and 477 North Fifth Street, Philadelphia, and Fordhook Farms, Doylestown, Pennsylvania.

LAURIN WHITING BURTON

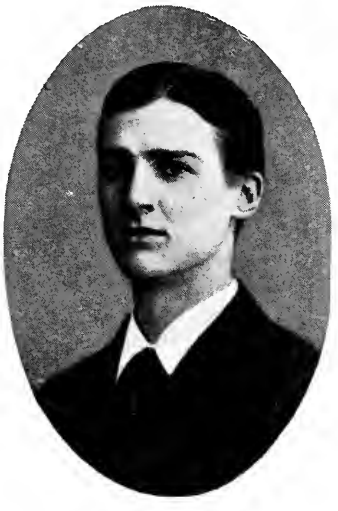
BURTON matriculated in January, 1874, in the Scientific Department, entering the Class of 1877 in the second term. Afterwards he was transferred to the Class of 1878, and left College during the Sophomore Year, going immediately into business. In 1878 he became an inspector of buildings in the city of New York, which office he held until 1895, when he secured a position with the New York, Lake Erie and Western Railroad Company, which he still retains.

Born, Philadelphia, February 9, 1857; parents, Aaron Bowman Burton and Deborah A. Trites; married, June 11, 1889, Marguerite Kerr Ready. Address, No. 90 Bentley Avenue, Jersey City, New Jersey.

JOHN CASSIN

CASSIN matriculated in the Department of Arts in the fall of 1874, but left College at the close of the Freshman Year, and shortly afterwards went into business. In 1878 he became an auditor in the office of the controller of Philadelphia County, Pennsylvania, and remained there in that capacity until his death, in 1897.

Born, Norristown, Pennsylvania, December 1, 1855; parents, Isaac Sharpless Cassin and Emily Hunter; married Mary Whitelock Lare; died June 8, 1897.



ARTHUR LATHAM CHURCH

B.S.

WITH the intention of securing practical experience in Mechanical Engineering, Church entered the employ of the William Cramp & Sons' Ship and Engine Building Company, in the fall of 1878, as an apprentice in their machine shops. In about two years he was transferred to the draughting-room, where he remained until June, 1882. During his stay at Cramps' he was engaged in the design and construction of the engines of some of the best known vessels of the day.

With the same object in view, in June, 1882, he became oiler and electrician of the steamship "Queen of the Pacific," on its initial voyage to San Francisco. The vessel called at Rio de Janeiro, Punta Arenas, in Magellan Straits, Valparaiso, and Port Harford, California, arriving in San Francisco eleven weeks after leaving Philadelphia. From San Francisco, Church made fourteen trips by sea to Portland, Oregon. On March 16, 1883, he

passed the government examination, receiving papers entitling him to serve as third assistant engineer of ocean steamships. A few days later he joined the crew of the steamship "City of Peking," as sixth assistant engineer, bound for Japan and China. After returning from this voyage he, in June, joined the steamship "Granada" as third assistant engineer, sailing for Panama, calling *en route* at various ports in Mexico and Central America. On his return to San Francisco, Church left the "Granada," and, having obtained the sea experience desired, entered the employ of the Union Iron Works of San Francisco as draughtsman in September, 1883, remaining there until July, 1884. He then returned to Philadelphia overland, arriving there after about two years' absence.

In August, immediately after his arrival in Philadelphia, Church was placed in charge of the engines and boilers at the Electrical Exhibition of the Franklin Institute at Thirty-second Street and Lancaster Avenue, Philadelphia. During the following winter he was occupied in testing engines and boilers, and during the spring in a duration test of incandescent electric lamps for the Franklin Institute. In July he was made superintendent of the Mechanical Schools of the Spring Garden Institute of Philadelphia, and in the fall of 1885 was appointed to the supervision of the engines and boilers of the Novelties Exhibition of the Franklin Institute.

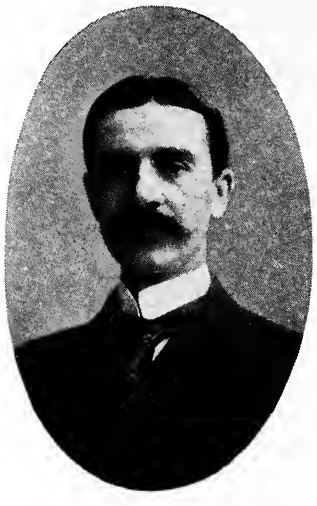
In March, 1886, he was placed in charge of one of the departments at the Baldwin Locomotive Works of Philadelphia, which position he has since held. In this position he has made several short journeys, and in September, 1895, a voyage to Peru with an expedition organized by Sir Henry Tyler, of London, to determine whether electricity could be applied to the railroads of that coun-

try. On this journey he examined the Panama Canal, crossed the Andes Mountains twice, the first time proceeding from Callao to the head-waters of the Amazon River on the eastern slope of the mountains, and the second time going from Mollendo to La Paz, Bolivia, returning to Antofagasta on the coast of Chile. Church has patented several inventions in the line of his profession, and has also found time, outside of it, to do some clever work as an etcher and water-colorist, several of his sketches being reproduced in this volume.

He has kept up a very active interest in University affairs, being a member of the Delta Psi Fraternity; a member of the Graduate Advisory Board of the University of Pennsylvania Glee, Mandolin, and Banjo Clubs, season of 1897; and of the College and General Alumni Societies.

He is also a member of the Franklin Institute of Philadelphia, in which he served as a member of the Committee on Science and the Arts, from January, 1892, to January, 1896; of the Spring Garden Institute, of Philadelphia, of which he has been a manager since June, 1889; of the Fairmount Park Art Association; of the Pennsylvania Academy of the Fine Arts; of the Orpheus Club, in which he has served as librarian, secretary, and member of the executive committee; of the University Club of Philadelphia; and of the Germantown Cricket Club.

Born, Philadelphia, October 11, 1858; parents, William Augustus Church and Elizabeth Inskeep Barker; married, December 5, 1888, Louisa Brant; child, Herbert, born October 4, 1890; residence, No. 5121 Pulaski Avenue, Germantown, Philadelphia; business address, No. 500 North Broad Street, Philadelphia.



CLARENCE MUNROE CLARK

A.B.

CLARK came into the Freshman Class, Department of Arts, in 1874. In September following his graduation he started upon his business career by entering the chemical laboratory of the Midvale Steel Works at Nicetown, Philadelphia. His purpose in entering this establishment was to secure a detailed and accurate knowledge of the chemical part of steel manufacture, a department which was promising to become an important one in the process of making steel. After a short period in this department Clark entered the forging department, of which he soon became the head. In 1883 he was given a six-months' leave of absence, which he spent abroad, examining the steel works of England, France, Belgium, and Germany. On his return he took charge of the manufacture of the ordnance material and the locomotive- and car-wheel tires at the Midvale Works, securing speedy promotion to the post of second assistant superintendent, and in 1886 to the position of assistant superintendent.

In 1887 Clark left the Midvale Steel Works to become secretary and treasurer of the Flat Top Coal Land Association, a company owning almost the entire territory from which Pocahontas coal is mined. The development of this land led to the formation of various iron companies for the mining of iron ore and the manufacture of pig iron, and of similar and collateral companies; so that from 1887 to 1893 Clark was actively engaged in the management of corporations which were operating mines and furnaces and developing land.

In September, 1893, he joined the banking house of E. W. Clark & Co., of Philadelphia, taking charge of their outside interests, particularly of their street railway and car trust business, at the same time retaining his position of vice-president and treasurer of the Flat Top Coal Land Association.

Clark is a member of Delta Psi, the College and General Alumni Societies, the University Club of Philadelphia, the Germantown Cricket Club, the Philadelphia Country Club, and the Scranton Club.

Born August 27, 1859, at Germantown, Philadelphia; parents, Edward W. Clark and Mary Todhunter Sill; married, November, 13, 1884, Mary N. Taylor; children, Edward Winslow, Franklin Taylor, and Clarence Sewell. Residence, No. 5353 Magnolia Street, Germantown, Philadelphia; business address, Bullitt Building, Philadelphia.

HERMAN CLARKE

CLARKE left College during the Freshman Year, having matriculated as a student in the Department of Arts in the Fall of 1874. He is a member of Delta Psi.

He has since followed the calling of a stock-broker in New York City.

Born, Philadelphia, February 15, 1858; parents, Thomas C. Clarke and ——. Address, No. 44 Broadway, New York City.

WILLIAM GREENE COCHRAN

COCHRAN was admitted in 1874 to the Freshman Class, Scientific Department. He left at the close of his first term in the Sophomore Year, afterwards entering Lehigh University. He is a member of Delta Psi.

He has been a merchant in Philadelphia since finishing his studies.

Born, Philadelphia, December 17, 1857; parents, William Cochran and Eliza Burton Penrose; married Gertrude L. Cannell. Residence, No. 1431 Spruce Street, Philadelphia.

JAMES CLARK CORRY

A.B., A.M., LL.B.

CORRY entered the Class in 1874, as a student in the Freshman Class, Department of Arts. After graduation he matriculated in the Law School of the University, from which he received the degree of Bachelor of Laws in 1880. Since that time he has practised his profession in Philadelphia. He is a member of Delta Psi, of the College Alumni Society, of the Academy of Natural Sciences, and of the University Club of Philadelphia.

Born, Philadelphia, May 3, 1857; parents, John Corry and Letitia Clark; married, April 12, 1887, Anna Coates Landell; children, John and Mabel. Residence, No. 117 North Nineteenth Street, Philadelphia; business address, No. 263 South Fourth Street, Philadelphia.

WILSON DARLING CRAIG

CRAIG entered with the Freshman Class, in 1874, as a student in the Department of Arts, and died in his Junior Year. He was a member of Delta Psi.

In 1895 his sister, Alice D. Craig Hatfield, and brother, Hugh Craig, Jr., contributed to the University, as a memorial of their brother, a fund sufficient to erect one of the Dormitory Houses, which has been named the Wilson D. Craig House.

Born, Philadelphia, November 16, 1856; parents, Hugh Craig and Catharine McCausland; died, Philadelphia, March 12, 1877.

DOORWAY CRAIG HOUSE

JAMES CHALICE CRAVEN

A.B., A.M.

CRAVEN entered College originally with the Class of 1876, matriculating in 1872. He was soon, however, obliged to discontinue his studies, but subsequently re-entered the University in 1874, as a Freshman in the Class of 1878, Department of Arts. After graduation Craven studied at the Divinity School of the Protestant Episcopal Church of Philadelphia. He was appointed assistant at Holy Trinity Church, Philadelphia, afterwards was called as rector of the Epiphany Church, Providence, Rhode Island, later as rector of a church at Dubuque, Iowa, and on May 1, 1890, was elected assistant minister of the Church of the Saviour, Philadelphia, where he remained until May 1, 1892. His last charge was a mission church at Jenkintown, Pennsylvania.

Born, Philadelphia, September 22, 1848; parents, James Chalice Craven and Elizabeth Price; died, Philadelphia, March 25, 1893.

JOHN PRICE CROZER

CROZER entered the Scientific Department of the College in 1874, as a Freshman, and left in his Junior Year, since which time he has been occupied chiefly as a manufacturer of cotton goods, being a member with his father of the firm of Samuel A. Crozer & Son, of Upland, Pennsylvania.

He is treasurer of the Crozer Iron Company and of the Edith Iron Mining Company, president of the Upland Coal and Coke Company, a director in the Delaware County National Bank, and clerk of the Upland Baptist Church. He is a member of the Art, University, and Union League Clubs of Philadelphia, and of the Corinthian Yacht Club, being a yachtsman of considerable note.

Born, Upland, Pennsylvania, February 23, 1858; parents, Samuel A. Crozer and Abby Coates Cheney; married, January 29, 1880, Elizabeth S. Warder; children, Margaret W., Josephine, Abby C., and Elizabeth W. Residence and business address, Upland, Pennsylvania.

EDWARD VINCENT D'INVILLIERS

B.S.

D'INVILLIERS did not enter the Class until Sophomore Year, matriculating in the Scientific Department in 1875. After his graduation he was, until 1885, a regular member of the staff of the Second Geological Survey of Pennsylvania, under Dr. J. Peter Lesley, from whom d'Invilliers had received his professional instruction in the Towne Scientific School.

Assuming a private office for expert professional work in 1885, he nevertheless continued to perform work for the Survey, contributing special memoirs to the succeeding Annual Reports on the geology of the Pittsburg Coal Region and the unique Cornwall Iron Ore Mines of Lebanon County, both of these handsomely illustrated with standard maps. His final contribution to the literature of the Survey was the work of compiling and editing those portions of the Final Summary of the Geology of Pennsylvania relating to the bituminous coal-fields of the State,

which, on account of the illness of the director, the Board of Commissioners assigned to him.

The intimate and extended acquaintance with the coal and iron interests of the Keystone State thus gained, naturally prepared him for expert work in the Appalachian district of America, and in the past decade the greater part of his time has been devoted to the examination and development of coal, iron, manganese, cements, and phosphates, from Canada to Alabama, as well as in Cuba and the West Indies. Of late he has been considerably engaged in expert work on the precious metals, principally gold, in the West and in Mexico.

d'Invilliers has published reports on Berks, Centre, Juniata, Mifflin, Snyder, and Union Counties of Pennsylvania, and upon the Limestones and Iron Ores of the Great Valley of Lebanon, Dauphin, Cumberland, and Franklin Counties of Pennsylvania, and the following published monographs and reports: The Geology of the Pittsburg Coal Region and the Cornwall Iron Ore Mines of Lebanon County, Pennsylvania; Final Summary of the Geology of Pennsylvania, Vol. III., Parts II. and III.; The Cripple Creek—New River Region of Virginia; The Geology of the Clinch Valley; A Comparison of some Southern Cokes and Iron Ores; The Brown Hematite (Limonite) Ores of the Siluro-Cambrian Limestone of Centre County, Pennsylvania; Phosphate Deposits of the Island of Navassa, West Indies; Resources of the Upper Cumberland Valley of Southeast Kentucky and Southwest Virginia; The Lilly and Crescent Mines of Page County, Virginia; The Bradenville Coal Lands of the Connellsville Basin, Pennsylvania; The Humes, Holt & Co.'s Lands in the Snow Shoe Basin, Pennsylvania; The Valentine Iron Ore Lands, Centre County, Pennsylvania; Resources along the West Virginia and

Ironton Railroad, West Virginia; The Virginia and Tennessee Coal and Iron Company, and Somerset Coal Lands, Pennsylvania.

Published memoirs of his examinations for the Norfolk and Western Railroad, Louisville and Nashville Railroad, and for private mining corporations, have resulted in large investments of capital.

d'Invilliers is a member of the University Club; the College Alumni Society; the American Philosophical Society of Philadelphia; the American Institute of Mining Engineers, of which he was vice-president from 1894 to 1896; the Franklin Institute of Philadelphia; the Engineers' Club of Philadelphia, of which he was a director in 1890; and a fellow of the Geological Society of America. He has contributed papers to the transactions of these societies, and is at present consulting engineer for and director in several mining corporations in Pennsylvania, West Virginia, and Mexico.

d'Invilliers has been president of the Class since graduation.

Born at Germantown, Philadelphia, August 2, 1857; parents, Camille d'Invilliers and Ann S. Maitland; married, June 6, 1894, Ann Maitland; children, Virginia Maitland and Anne Maitland. Residence, No. 6630 McCallum Street, Germantown, Philadelphia; business address, No. 711 Walnut Street, Philadelphia.

GERTRUDE KLEIN PEIRCE EASBY

Certificate of Proficiency (Science)

MRS. EASBY, then Miss Peirce, entered the Class in 1876 as a special student in Chemistry, receiving a Certificate of Proficiency in June, 1878. She took a year's post-graduate course at the University during 1878 and 1879. Mrs. Easby has given considerable attention to Reformatory and Preventive work among girls, and in the line of this work has served two terms as a member, on the part of the city, of the Board of Directors of the Female House of Refuge, of Baltimore, Maryland, a city and State institution. When the appointment was made it was one of five similar positions filled by women for the first time in the history of Baltimore. Mrs. Easby helped to organize the New Century Club, of Wilmington, Delaware, during her one time residence in that city, and was a founder and member of the first Board of Governors of the Arundell Club, of Baltimore. She is also a member of the College and Progress Clubs, of Baltimore, and a life member of the Academy of Natural Sciences, in Philadelphia. Mrs. Easby was joint author with Professor Edgar F. Smith, Ph.D., of the University, of a treatise on Nitration Meta Chlor. Salicylic Acid.

Born, Philadelphia, May 16, 1859; parents, Cyrus Newlin Peirce, D.D.S., and Charlotte Van Vorst Woodward; married, January 24, 1884, Francis Hoskins Easby (Class of 1881); child, John Newlin Peirce, born October 16, 1896. Residence, No. 1223 Mt. Royal Avenue, Baltimore, Maryland.

WILLIAM PATTEN ELWELL

B.S.

ELWELL was admitted to College in 1874 as a Freshman in the Scientific Department. He has lived in Philadelphia since his graduation, following his chosen vocation of a merchant, succeeding his father in the firm of Darrah & Elwell, ship chandlers.

He is a member of Phi Kappa Psi, of the College Alumni Society, of the Priestley Club of the University, and of the Union League of Philadelphia.

Born, Philadelphia, January 19, 1858; parents, Joseph Sprague Elwell and Rachel Jane Patten; married, Mary D. Stulb; children, Joseph S., born and died, 1886; Rachel, born, 1888; Theodora S., born, 1892. Residence, No. 2207 Mt. Vernon Street, Philadelphia; business address, No. 512 South Delaware Avenue, Philadelphia.

ANNA LOCKHART FLANIGEN

Certificate of Proficiency (Science)

MISS FLANIGEN entered the Scientific Department of the University in 1876, as a special student in Chemistry, receiving a Certificate of Proficiency in June, 1878. She then took a two years' post-graduate course in Physics and Chemistry, with additional laboratory work. Miss Flanigen taught chemistry for a year, this being followed by a second year's work as instructor in physics and chemistry, with laboratory work, after which, in 1883, she accepted the position of chemist and assayer with the Keystone Watch Case Company, being one of the first women to take up the profession of assayer. Early in 1898 Miss Flanigen resigned this position because of ill health and went abroad, travelling on the Continent and through Great Britain until the latter part of the year, when she entered the University College of London, where she is now studying with a view to more advanced scientific work.

Miss Flanigen has the distinction of being the first woman admitted as a student in any department of the University, except that of Music. She is a member of the New Century Club of

Philadelphia, and was one of the original members and secretary of the New Century Working Women's Guild.

Born, Philadelphia, January 26, 1852; parents, William C. Flanigen and Jane Adams. Residence, No. 2120 Spruce Street, Philadelphia.

CHARLES PEMBERTON FOX

FOX entered the Freshman Class, Scientific Department, in 1874, and left during his Sophomore Year. For several years after leaving College he devoted himself to commercial pursuits in the city of Philadelphia. After his father's death, in 1883, he withdrew from business and travelled abroad for about a year. He never entered actively into business again, but has maintained his residence continuously in Philadelphia, making, however, several quite extensive European trips.

Fox is a member of the Philadelphia, Rittenhouse, and Country Clubs of Philadelphia.

Born, "Chestnut Wood," Bucks County, Pennsylvania, 1858; parents, George Fox, M.D., and Sarah Valentine. Residence, No. 1820 Chestnut Street, Philadelphia.

GEORGE CUTHBERT GILLESPIE

GILLESPIE entered the Freshman Class, Scientific Department, in 1874, and left College at the end of his Sophomore Year. From 1877 to 1894 he followed the calling of a merchant in the city of Philadelphia, entering the wholesale grocery firm of Gillespie, Zeller & Co., in which firm his father was senior partner. In 1886 he was admitted to the firm as a partner, continuing in this capacity until the dissolution of the firm in 1894. From 1894 to 1897 Gillespie was an editor and publisher, being one of the founders and acting as publisher of the *American Historical Register* from 1894 to 1896, and as secretary and treasurer of the Historical Register Publishing Company during the same years. In the early spring of 1896 Gillespie relinquished this work to become historical editor of the *Evening Bulletin* of Philadelphia, originating the Historical Department of that newspaper. Later in the same year he resigned this position on the *Evening Bulletin* to accept a similar position on the *Evening Telegraph*, of the same city, founding the Historical Department of that paper. When this department on the *Telegraph* discontinued Gillespie entered the insurance

business, joining the firm of Odiorne & Longstreth in October, 1896. Since that time, in addition to his insurance work, he has found time to write articles for magazines and newspapers, notably the *Sunday Press*, of which he is a special correspondent on a variety of subjects, chiefly historical, many of which he has himself illustrated.

He is a member of the Historical Society of Pennsylvania, of the Pennsylvania Society of the Sons of the Revolution, member and for five years secretary of the Pennsylvania Society of Colonial Wars, at present a manager and for many years the secretary of the Bedford Street Mission. In addition to this last-named charitable work, he has been active in the work of the Protestant Episcopal Church in Philadelphia. He was for many years a member of the vestry of St. Elisabeth's Church, and the editor and publisher of the *Grace Church Guild*, a parish paper; and for several years a member of the Local Council of the Brotherhood of St. Andrew, and a delegate to the General Society. He is at present one of the managers of the Christ Church Historical Society.

He is a member of Delta Phi and of the College Alumni Society, and also of the Markham Club of Philadelphia, at one time serving as a member of its House Committee. He has travelled quite extensively for pleasure, through Europe, Canada, and the Bermudas.

Born, Philadelphia, September 14, 1858; parents, Thomas Leonard Gillespie and Mary Cuthbert; married, April 26, 1899, Mary Broadbent Buzby. Residence, "Woodverge," Moorestown, New Jersey; business address, No. 427 Walnut Street.

JOHN GRAHAM

GRAHAM matriculated as a member of the Freshman Class, of the Department of Arts, in 1874, but left soon after College opened. He re-entered in 1875 as a Freshman in the Class of 1879, but left during his Sophomore Year. He was graduated at the Reformed Presbyterian Theological Seminary at Alleghany, Pennsylvania, in 1881, after which he assumed the charge of a church at Rochester, New York, where he remained until 1889. Since that time he has resided in Philadelphia and Alleghany City, Pennsylvania.

Born, New York City, May 14, 1857 ; parents, Hugh Graham and Maria Williams ; married, Emma Mahaffy. Residence, Alleghany City, Pennsylvania.

WILLIAM HENRY GRANT

Certificate of Proficiency (Science)

GRANT entered the Junior Class in the Department of Arts in 1876 as a special student. He spent the first year after leaving College in California, in the office of a firm of general agents for merchandise. Returning to Philadelphia, he devoted the year of 1879–80 to literary studies. From 1880 to 1886 he followed mercantile and banking pursuits. From 1886 to 1888 he was resident in South Carolina, president of a cotton-mill there, and at the same time a member of the firm of Grant & Grant, bankers in New York. For the last ten years Grant has been active in the foreign missionary enterprises of the world, and in such a field has travelled extensively. In the course of these travels he has visited about three hundred mission stations in Europe, Asia, Africa, and Mexico. He has held temporarily the position of assistant secretary of the Board of Foreign Missions of the Presbyterian Church, and for the past six years has been secretary of the Conference of Foreign Mission Boards in the United States of America and Canada. He

is secretary and treasurer of the trustees of the Christian College in China, and is acting librarian of the Foreign Mission Library of the Presbyterian Church.

Grant has written several magazine and newspaper articles in the line of his special interest and has published also a number of articles in leaflet and pamphlet form which have had a wide circulation. He is at present compiling a gazetteer of missions.

He is a member of the General Alumni Society.

Born, Philadelphia, December 17, 1858; parents, Charles Henry Grant and Emma Collier. Residence, Summit, New Jersey; business address, No. 156 Fifth Avenue, New York City.

CLIFFORD PREVOST GRAYSON

GRAYSON entered the Class in 1874 as a Freshman in the Scientific Department, and left College at the close of his Freshman Year. After leaving College he entered the Pennsylvania Academy of the Fine Arts, where he remained until 1878. He then went to Paris, where he passed the examination at the École des Beaux-Arts, entering the atelier of J. L. Gérôme, with whom he studied for three years. He then joined the Artists' Colonies at Pont Aven and Concarneau, and later opened a studio in Paris. In 1881 he exhibited for the first time at the Paris Salon, and from then until 1886 exhibited annually at that and other exhibitions. His canvas, "The Fisherman's Family," presented at the Salon in 1885, was awarded the Temple Gold Medal in 1887 by the Pennsylvania Academy of the Fine Arts, and purchased for the permanent Temple Collection. In 1886 Grayson's picture, entitled "Mid-day Dreams," was awarded the two thousand dollar grand prize by the American Art Galleries in New York. This canvas was afterwards purchased by the Corcoran Art Gallery in Washington, where it now hangs.

Mid Day
Dreams
Clifford P. Grayson

Grayson returned from Europe to become director of the Art Department of the Drexel Institute of Philadelphia, which office he still fills. He was secretary of the Pennsylvania Committee on Fine Arts and Jury Selection for the Columbian Exposition in 1893.

He is a member of the General Alumni Society and of the Art Club of Philadelphia, in 1890 serving on its Board of Directors. From 1892 to 1895 he was a member of the Pennsylvania Society of the Sons of the Revolution.

Born, Philadelphia, July 14, 1857; parents, Frederick William Grayson and Mary Mallet-Prevost. Residence, No. 251 South Sixteenth Street, Philadelphia; business address, Drexel Institute, Philadelphia.

WALTER FERDINAND HALL

LL.B.

HALL entered College in 1874, as a Freshman in the Scientific Department, and left at the close of his Sophomore Year. He entered the Law School of the University in 1878, receiving the degree of Bachelor of Laws in 1880. He practised law in Philadelphia until 1889, and in November of that year associated himself in business with his father. In 1888 and 1889 Hall travelled quite extensively in Great Britain and Continental Europe. In 1893, after the death of his father, Hall became a member of the present firm of Hall & Carpenter, importers of tin plate and metals.

He is a member of the General, College, and Law Alumni Societies and of the Pennsylvania Society of Sons of the Revolution ; a life member of the Historical Society of Pennsylvania ; a life member and Past Master of Philadelphia Lodge, No. 72, Free and Accepted Masons ; and a life member and Past High Priest of Jerusalem Chapter, No. 3, Royal Arch Masons. He was until recently a member of the Racquet Club, the Merion Cricket

Club, the Law Association, and the Law Academy, of Philadelphia, and is now a member of the Union League, of the same city, and of the St. David's Golf Club.

Born, Philadelphia, December 4, 1856; parents, John Augustus Rattaux Hall and Caroline Alford; married, May 18, 1882, George Annie Benners Stouffer; children, Catharine Benners and Thomas Gardiner (deceased). Residence, No. 119 North Twentieth Street, Philadelphia; business address, No. 709 Market Street, Philadelphia.

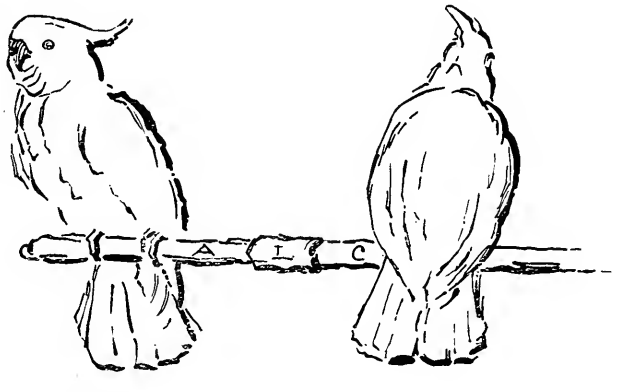
FREDERICK FRALEY HALLOWELL

HALLOWELL entered the Department of Arts in 1874 as a Freshman, and left College at the beginning of his Sophomore Year. In October, 1875, he became a clerk in the office of Hallowell & Co., Bankers, in Philadelphia, but relinquished this occupation to study law, entering the office of Joseph C. Fraley, Esq., as a student in June, 1877. He was admitted to the Bar of Philadelphia on June 8, 1880, and practised law in that city from that time until October, 1884, when he was elected assistant treasurer of the Schuylkill Navigation Company. He held this position until 1886, when he was made secretary of the company, an office which he retained until February, 1890, when he organized the Wayne Title and Trust Company, of which organization he acted as secretary and treasurer until June, 1893. Since that time he has acted as private secretary (at present with the rank of assistant paying teller) to the president of the Western Savings Fund Society, of Philadelphia.

Mr. Hallowell is a member of the General Alumni Society, of the University Club, of the Houston Club, a life member and

at the present time secretary of the College Boat Club of the University, a life member of the Athletic Association of the University, a member and one of the Board of Governors of the Radnor Cricket Club, and a member and one of the governors of the St. David's Golf Club. He was also connected with the Schuylkill Navy as secretary from 1882 to 1885.

Born, Philadelphia, March 8, 1859; parents, Joshua Longstreth Hallowell and Sarah Cresson Fraley; married, July 26, 1887, Mary Elizabeth Hunter; children, Nancy Sterrett, born September 11, 1888; Margaret Hunter, born May 5, 1890; John Guy, born July 11, 1892; Frederick Cresson, born September 29, 1896. Residence, Wayne, Delaware County, Pennsylvania; business address, No. 1000 Walnut Street, Philadelphia.



WILLIAM JOHNS HARKNESS

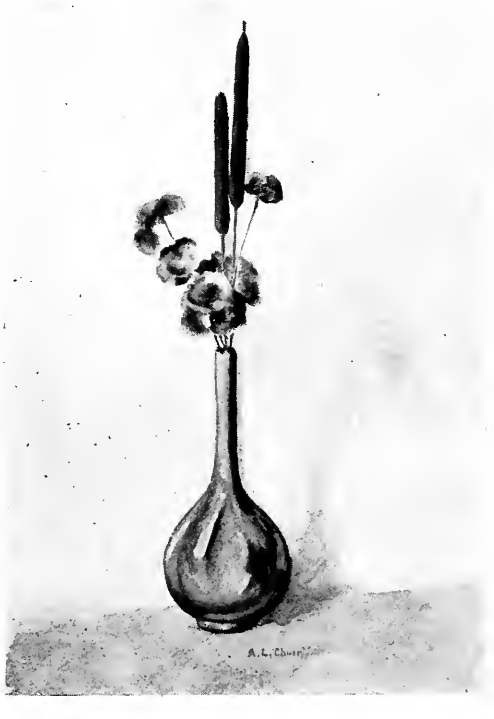
B.S. (Penna.), A.M., Ph.D. (Illinois Wesleyan University)

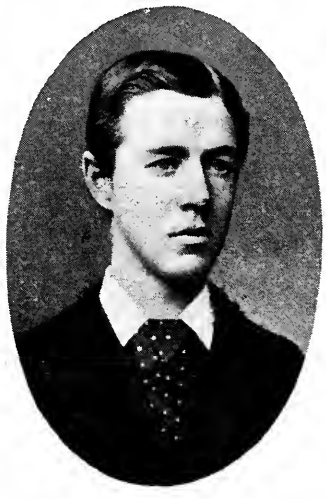
HARKNESS matriculated in 1874 as a Freshman in the Scientific Department. After graduation he spent three years studying practical mechanics in the machine-shops of William Sellers & Co., of Philadelphia, and then for two years worked in the draughting room of Hoff & Fontaine, Engine Builders. After this he acted as private secretary for his father, an oil merchant. In 1886 he went to West Virginia to help in the development of some land which his father had acquired, and there decided to enter the ministry. He became a member of the West Virginia Conference of the Methodist Episcopal Church at Parkersburg, since which time he has been pastor of churches in the following places in West Virginia: Williamstown, Elizabeth, New Martinsville, Terra Alta, and Weston, and is now connected with the Chapline Street Church in Wheeling. Since entering the ministry Harkness has devoted considerable time to study, having taken a course at Chautauqua and a three years' course in Philosophy at the Illinois Wes-

leyan University, receiving from that institution the degree of A.M. in 1896 and Ph.D. in 1897. He has published two articles, one the "Rise and Fall of Stoic Philosophy," and the other "Why Preachers should study Metaphysics."

Harkness is a member of Phi Kappa Psi and of the Order of Free and Accepted Masons.

Born in Philadelphia, September 12, 1860; parents, W. W. Harkness and Annie Cousty; married, June 11, 1891, Elizabeth Vernon; children, Katharine, Robert Morris, and John Cousty. Residence, No. 2318 Chapline Street, Wheeling, West Virginia.





ALAN HALE HARRIS

A.B.

HARRIS came into the Class in 1874 as a Freshman in the Department of Arts. Since graduation he has devoted himself to commercial pursuits, for a number of years residing and doing business in New York City. At present he is treasurer of The Southern Cotton Oil Company of Philadelphia.

He is a member of Delta Psi.

Born, Germantown, Philadelphia, February 19, 1859; parents, Rev. John Andrews Harris, D.D. (Class of 1852), and Almy S. Hale; married Helen Marie Day. Residence, No. 301 Highland Avenue, Chestnut Hill, Philadelphia; business address, No. 120 South Third Street, Philadelphia.

HENRY REED HATFIELD

Certificate of Proficiency (Arts), M.D. (Jefferson Medical College)

HATFIELD matriculated in the Freshman Year in the Department of Arts as a special student, receiving a Certificate of Proficiency at the end of the Senior Year. After leaving College he studied medicine under the preceptorship of his father, Dr. Nathan Lewis Hatfield, entering the Jefferson Medical College of Philadelphia, from which he was graduated, with the degree of M.D., in 1881. His purpose in studying medicine was to qualify himself to become a surgeon in the United States navy, but his mother having become an invalid shortly before his graduation, he decided that it was his duty to remain at home; and, as he had never intended to become a general practitioner, he determined to study law. He therefore entered the law office of George W. Biddle, Esq., of Philadelphia, as a student, and was, at the end of the usual course of reading and instruction, admitted to the bar in May, 1884. He remained in the office of Mr. Biddle as assistant for a year or

two, when he became associated with John J. Ridgway, Esq., in the practice of his profession, maintaining this connection for several years, much of which time, however, he spent abroad, principally in Spain, where he devoted himself to the study of languages and of diplomatic customs and practices. During this period and at other times he travelled extensively upon the continent of Europe, visiting also Iceland and Morocco. Since his return from Europe, in 1896, he has continuously practised the profession of law in Philadelphia.

Hatfield is a member of Delta Psi, of the St. Anthony's Club of Philadelphia and New York, of the Rittenhouse, University, and Penn Clubs of Philadelphia, of the Radnor and Rose-Tree Hunts, of the Philadelphia Barge Club, of the Philadelphia Gun Club, of the First Troop, Philadelphia City Cavalry, and of the Board of Directors of the Preston Retreat of Philadelphia.

Born, Philadelphia, July 14, 1858; parents, Nathan Lewis Hatfield, M.D., and Susanna Lewis; married, November 19, 1889, Alice Darling Craig (sister of Wilson D. Craig, '78, deceased). Residence, No. 1825 Walnut Street, Philadelphia; business address, No. 723 Walnut Street, Philadelphia.

REUBEN AUGUSTUS HEATON

HEATON was admitted in 1874 to the Freshman Class, Scientific Department, and left College during his Sophomore Year. From 1876 to 1885 he was occupied as a coal operator in Schuylkill County, Pennsylvania.

He is a member of the College Alumni Society.

Born, Tamaqua, Pennsylvania, May 12, 1856; parents, Reuben Ayres Heaton and Mary Carter. Residence, 2117 Chestnut Street, Philadelphia.

WILLIAM EDWARD HELME

B.S.

HELME entered the Class in the first term of the Sophomore Year as a student in the Scientific Department. After graduation he sailed for Europe with his classmen, Norris, Murphy, and Elwell. He and Norris spent about fifteen months abroad travelling over Europe and in Egypt and Palestine. Upon his return he spent a year at the University, taking a post-graduate course in gas analysis under Professor Sadtler. In 1880 Rowland and Helme went on a trip across the plains to the Soda Lakes, San Francisco, and the Yosemite. He succeeded his father as a manufacturer of gas-meters in Philadelphia, where Helme has always resided. He has made three other trips abroad, one in 1874, one in 1882, and one in 1897, and also visited Mexico on a pleasure trip in 1895.

Helme is a member of Phi Kappa Psi, of the College Alumni Society, of the Pennsylvania Historical Society, of the Priestley Club of the University, of the Pennsylvania Society of Sons of the Revolution, of the St. Andrew's Society, of the American

Gas-Light Association, of the Union League of Philadelphia, and of the University Club of Philadelphia.

Born, Philadelphia, January 26, 1857; parents, William Helme and Caroline A. Leinhardt; married, March 30, 1882, Edith Benson; child, Edith, born March 9, 1885. Residence, No. 312 South Broad Street, Philadelphia; business address, No. 1339 Cherry Street, Philadelphia.

CHARLES PHILIP HENRY

A.B., A.M., M.D.

HENRY matriculated in the College in 1874 as a student in the Freshman Class, Department of Arts. After leaving College he decided to study medicine, and took his degree at the University in that science in 1882, immediately afterwards becoming a resident physician at the Philadelphia Hospital. In 1882 he was appointed physician to the male insane department of the Philadelphia Hospital, and later resident physician at Girard College. In 1884 he was commissioned assistant surgeon in the United States navy, with the rank of ensign, resigning December 20, 1898. He is at present engaged in the private practice of his profession as a physician in Philadelphia, and is also connected with the Faculty of the Catholic High School.

Born in Philadelphia, June 5, 1859; parents, Arthur Henry and Ann M. Glade; married, December 29, 1892, Agnes Brady. Residence, 1629 Race Street, Philadelphia.

JOSIAH OGDEN HOFFMAN

A.B.

HOFFMAN entered the Class in 1874 as a Freshman in the Department of Arts. Since graduation he has been engaged in business as an iron and steel merchant in the city of Philadelphia. He is now a member of the firm of The Carnegie Steel Company (Limited).

He is a member of the College and General Alumni Societies, of the Union League Club, of the Merion Cricket Club, of the University Barge Club, and of the Philadelphia Country Club.

Born, Wiconisco, Dauphin County, Pennsylvania, September 5, 1858; parents, George Edward Hoffman and Phœbe Wagner White; married, April 19, 1883, Helen Scott Lewis; children, John Lewis, Helen Scott, and Charles Fenno. Residence, Villa Nova, Delaware County, Pennsylvania; business address, Harrison Building, Philadelphia.

HENRY HOWARD HOUSTON, JR.

B.S.

HOUSTON entered the Scientific Department in 1874 as a member of the Freshman Class. In June, 1878, a few days after his graduation, he sailed for Europe, in company with his uncle, the Rev. Charles R. Bonnell. An extended tour was brought to a sad end at Rome, where, in the spring of 1879, Houston died from an attack of typhoid fever, contracted, probably, during the rainy season in northern Africa or Asia Minor.

Houston Hall, the undergraduate club-house, which is elsewhere described, was erected on the University campus in 1896 with funds contributed by his parents as a memorial of their son. Upon its wall hangs a portrait of Houston, painted by Cecelia Beaux, and presented to the University and the Club, which bears his name, by members of the Phi Kappa Psi Fraternity, of which he had been a member.

Born, Philadelphia, October 5, 1858; parents, Henry Howard Houston and Sallie Sherred Bonnell. Died, Rome, Italy, May 13, 1879.

CHARLES BENDER HURLEY

HURLEY entered College in 1874 as a Freshman in the Scientific Department, and left at the close of his Sophomore Year. From 1877 to 1879 he studied at the Philadelphia Polytechnic College. Since completing his studies, Hurley has been a civil engineer, in 1879 and 1880 acting as assistant engineer on the Northern Pacific Railroad. From 1880 to 1883 he was employed on the Mexican National Railroad in Mexico; and from 1883 to 1885 he was connected with the Baltimore and Ohio and Philadelphia and Reading Railroads. From 1885 to 1889 he held the positions of general manager and vice-president of the Pennsylvania Natural Gas Company, at Pittsburg, Pennsylvania; and since 1889 he has been general manager of the Tacoma Light and Water Company, at Tacoma, Washington.

Born, Philadelphia, April 7, 1859; parents, William Hopkins Hurley and Almira Frances Bender; married Ada McCraken. Address, Tacoma, Washington.

HENRY ATLEE INGRAM

LL.B.

INGRAM entered the Scientific Department of the College in 1874, coming from Swarthmore College, where he was a member of the Sophomore Class (1877), in order to take the course in mechanical engineering at the University of Pennsylvania. He remained in the Towne Scientific School of the University for three and a half years, when, having determined to study law, he registered as a law student with Francis Rawle and later with Charles Gibbons, Jr., Esquires, of the Philadelphia Bar, entering the Law Class of 1881 of the University of Pennsylvania, from which he graduated with the degree of Bachelor of Laws. Ingram was admitted to the bar of Philadelphia in June of 1881, and, after some time devoted to travel, commenced the practice of law in that city, where he has since been continuously engaged in his profession.

For a number of years Ingram was quite earnestly associated with the better class of political life in this city, and in 1888 was elected secretary of "The Pennsylvania Club," becoming later a

member of its Board of Governors and chairman of its Executive Committee. With others he took part in the State campaign of 1890, having been a member of the committee which induced Mr. Blaine to reconsider his determination not to enter the State of Pennsylvania during the campaign. He was also for some time a member of the Executive Committee of his ward Republican organization.

Ingram has also devoted attention to literary work, having published, in 1884, "The Life and Character of Stephen Girard, Mariner and Merchant," a work which has completed seven editions, and remains the standard authority on its subject, being the one used in Girard College, Philadelphia. He also published, in 1886, "Jean Girard de Montbrun," a biography of Stephen Girard's brother and business partner; and later "Illustrated Girard College," which has completed a number of editions. He has also contributed to various standard publications articles in both prose and verse, including a number of translations from the French. Some of his verses are republished herein.

Ingram was one of the earlier members of the University Club of Philadelphia, a member of the Lawyers' Club of Philadelphia, of the Sons of Delaware, and of the Knickerbocker and New Manhattan Athletic Clubs of New York City. He is now a member of the General Alumni Society, of the Philadelphia Cycle and Field Club, of the Pennsylvania Fish Protective Association, and of the Union League of Philadelphia.

Born, Philadelphia, February 8, 1858; parents, Thomas Robinson Ingram and Caroline Eugenia Girard Hemphill. Residence, No. 106 South Forty-second Street, Philadelphia; business address, No. 912 Crozer Building, Philadelphia.

WILLIAM HEMPHILL INGRAM

INGRAM entered College as a Freshman, in the Department of Science, in 1874, and left in the middle of his Senior Year. He has been in active business in Philadelphia as a manufacturer since 1880.

Ingram is a member of the General Alumni Society and of the Franklin Institute and the Photographic Society of Philadelphia.

Born, Philadelphia, October 11, 1855; parents, Thomas Robinson Ingram and Caroline Eugenia Girard Hemphill. Residence, No. 106 South Forty-second Street, Philadelphia; business address, No. 106 North Third Street, Philadelphia.

WILLIAM ARCHER IRVING

IRVING entered College as a Freshman in the Towne Scientific School in 1874, leaving at the end of his Junior Year, since which time he has followed the business of a textile manufacturer, now holding the position of president and treasurer of the textile companies with which he has been connected. He is a director of the First National Bank of Chester, Pennsylvania.

Irving is a member of the Philadelphia Geographical Society and a member and director of the Penn Club of Philadelphia.

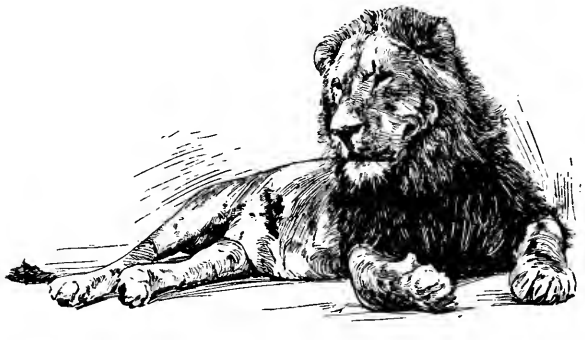
Born, Chester, Pennsylvania, August 12, 1856; parents, James Irving and Christiann Berry; married, January, 1881, Ella Lloyd; children, S. Lloyd and C. Jeannette. Residence and business address, Chester, Pennsylvania.

HENRY SCOTT JEFFERYS

A.B., A.M.

JEFFERYS entered the Department of Arts as a member of the Freshman Class, in 1874, leaving at the end of his Freshman Year, on account of his father's illness. In the fall of 1876, after an absence of a year, he re-entered College as a Sophomore, in the Class of 1879, with which class he was subsequently graduated. Immediately upon graduation he entered upon study for the ministry, and was shortly ordained deacon in the Protestant Episcopal Church. Subsequently, after studying theology at Burlington College, New Jersey, he was admitted to the priesthood, and became assistant minister at Old Swedes' (Gloria Dei) Church, Philadelphia. In 1881 he went to California, where he was for eight years a teacher and missionary, acting also during successive periods as assistant minister at St. Matthew's Church, San Mateo; Trinity Church, San Francisco; and St. Paul's Church, Los Angeles. In 1888 and 1889 he was associate editor of the *Apostolic Churchman*. In 1889 he went to Japan, where he has since resided, teaching as well as prosecuting the work of his ministry. He has been a professor of Latin and History in the College of Liberal Arts, at Kogoshima, and at present is in charge of Christ Protestant Episcopal Church, Sendai. In addition to his other work, Jefferys has found time to write extensively in Japanese for the newspapers and in the form of religious tracts. He is a member of the Japanese Red Cross Society.

Born, Clarksboro', Gloucester County, New Jersey, June 15, 1853; parents, William Henry Jefferys and Maria Susan Scott; married, October 28, 1884, in San Francisco, Mary Eleanor Beers; children, Mary Constance, Margaret Rebecca (deceased), Dorothea Ida, James Godfrey, and Lewis McKim. Residence, No. 6 Kata Hira Cho, Sendai, Northeast Japan.



WILLIAM NORTON JOHNSON

A.B., M.D.

JOHNSON entered the Freshman Class, Department of Arts, in 1874. After graduation he took up no serious occupation until September, 1879, when he entered a mercantile establishment for three months, long enough to learn that a business career was not congenial. In January, 1880, he entered upon the study of medicine at the University of Pennsylvania, not matriculating, however, until October of that year, and graduating in April, 1883. During the summer of 1883 Johnson was unofficially connected with the medical clinic of the University Hospital, serving also for short terms as resident both at that hospital and at the Children's Hospital of Philadelphia. In October, 1883, he entered upon his duties as resident physician of the Germantown Hospital, where he remained for one year. Since November, 1884, Johnson has practised medicine in Germantown and Philadelphia, being for a part of the time associated with the late Dr. Henry D. Harvey, also acting, in association with the late Dr. A. S. Roberts, in connection with the ortho-

pædic dispensary of the University Hospital. Since 1891 he has held the post of visiting surgeon to the Germantown Hospital.

His literary work has been limited to professional subjects.

Johnson is a member of the College and General Alumni Societies, a director in the Germantown National Bank, a manager of the Germantown Academy and Concord School, and a governor of the Colonial Club. He is also a member of the Philadelphia County Medical Society, of the Germantown Cricket Club, and of the Philadelphia Cricket Club.

Born, Germantown, Philadelphia, July 23, 1858; parents, Norton Johnson (Class of 1833) and Emily Hoyt; married, April 24, 1889, Sarah Trowbridge Bartow; child, Charlotte Trowbridge, died August 28, 1891. Residence and business address, No. 6460 Germantown Avenue, Germantown, Philadelphia.

CLARENCE KENNEDY

A.B., A.M., LL.B.

KENNEDY entered College in 1874 as a Freshman in the Department of Arts. After graduation he matriculated in the Law School of the University, receiving therefrom the degree of LL.B. in 1881. Since that time he has practised law in the city of Philadelphia.

He is a member of the College Alumni Society, of the Law Association, of the Law Academy, and of the Photographic Society of Philadelphia.

Born, Philadelphia, April 25, 1858; parents, Thomas Kennedy and Martha S. Gendell; married, June 10, 1891, Jennie M. McClintock; children, Clarence, Jr., and Ruth. Residence, No. 1737 North Nineteenth Street, Philadelphia; business address, No. 1420 Chestnut Street, Philadelphia.

HENRY MARTYN KNEEDLER

A.B., A.M. (Princeton)

KNEEDLER matriculated in 1874, and was admitted to the Freshman Class, Department of Arts. He left the University of Pennsylvania in 1876, at the close of his Sophomore Year, entering Princeton College in the following fall. He left Princeton in 1878 with the degree of Bachelor of Arts, and in 1881 received from the same institution the degree of Master of Arts. He has been occupied as a cotton manufacturer since his graduation.

He is a member of Delta Psi and of the Whig Society of the College of New Jersey.

Born, Philadelphia, October 10, 1857; parents, Jesse Sellers Kneedler and Catherine Sparhawk; married, October, 1897, Alice Harding. Residence, Chestnut Hill, Philadelphia; business address, Bridesburg, Philadelphia.

JOSEPH JONES KNOWLES

A.B.

KNOWLES entered College as a Freshman in the Department of Arts in 1874, and was graduated with his Class in June, 1878.

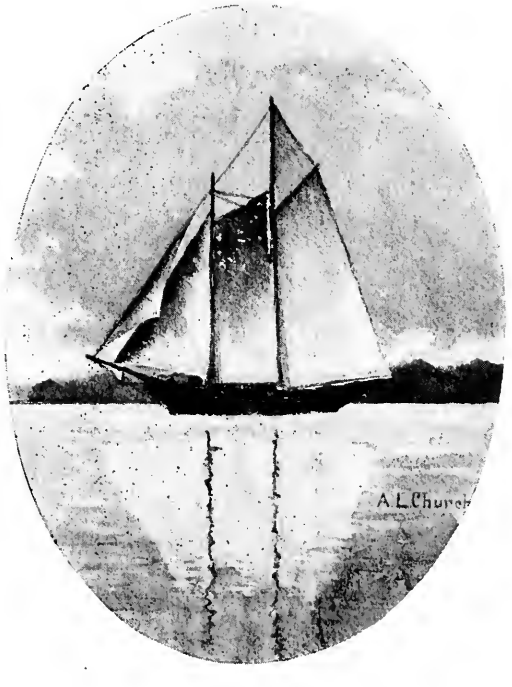
Born, Philadelphia, December 26, 1858; parents, George L. Knowles and Matilda Jones.

PEDRO PASCUAL PERFECTO LACOSTE

LACOSTE entered the Scientific Department in the second term of the Freshman Year, 1875, and left at the close thereof in June, 1875, in order to assist his uncle, Don Pedro Lacoste, of Cuba, in the management of several large plantations upon that island. Subsequently he resided for some years in Cincinnati, Ohio, and became naturalized as a citizen of the United States. While in Cincinnati he was a student in the University of Cincinnati. About 1881 he returned to Cuba and devoted himself to the business of sugar planting with great success, possessing at the beginning of the last Cuban insurrection one of the finest sugar plantations and country places on the island, later, unfortunately, completely destroyed by the war. During the insurrection Lacoste resided in the city of Havana, where he had become a man of affairs and of social distinction. He was the "Delegate" in Havana of the Cuban Junta, and rendered great assistance to the insurgents by supplying them with ammunition and medicines and sending them information of the Spanish movements. His position was one of great danger,

and it is believed that but for the fact that he was a citizen of the United States, he would at one time have suffered imprisonment or death at the hands of the Spanish general, Weyler, who strongly suspected his co-operation with the Cubans. On January 14, 1899, after the evacuation of the island by the Spanish, at the termination of the Spanish-American War, Lacoste was appointed civil mayor of Havana by the United States government, which had assumed the possession and control of Cuba under the terms of the treaty of peace with Spain, and this office he still retains.

Born, Holguin, Cuba, April 18, 1857; parents, Pascual Lacoste and Rafaela Grave de Peralta; married, May 7, 1885, Lucia Lacoste, daughter of his uncle, Pedro Lacoste. Residence, Havana, Cuba; business address, P. O. Box 53, Havana, Cuba.



FREDERICK HUMPHREVILLE LEWIS

B.S.

LEWIS entered the Freshman Class, Scientific Department, in 1874. After graduation he was engaged for about two months as a heliotroper, under Professor Haupt, in the Geodetic Survey of Pennsylvania, Whitney being associated with him in this work. This position he resigned to enter the engineering corps of the Pennsylvania Company at Pittsburg, where he remained until the fall of 1881, when he was compelled, on account of sickness, to abandon his work for a short period, during which he made a short trip to Bermuda. Almost immediately after his return Lewis accepted a position as inspector of bridges and buildings with the Northern Pacific Railroad Company, with head-quarters at St. Paul, Minnesota. After considerable practical experience in this position, in surveying and locating short railroad lines, Lewis was appointed acting superintendent of track bridges and buildings of the same company. On entering the employ of this company he found that it possessed absolutely no road records, and so devoted himself in his

new position to organizing a series of yard and road surveys, carrying them over the main line from Duluth to Tacoma and over branch roads in Minnesota and Dakota. Besides lacking road records, the company was also without data in regard to the position of the road through various townships and counties. A survey of these was also made through Lewis's department. In 1885 Lewis returned to Philadelphia and secured a position with the South Pennsylvania Railroad Company, then in course of construction. This railroad enterprise having collapsed, he accepted, in 1886, the position of eastern manager of the Pittsburg Testing Laboratory at Philadelphia, which office he retained for six years, resigning at the end of that time to enter the firm of Booth, Garrett & Blair, as a consulting engineer, in charge of their laboratory and inspecting department, and commencing business for himself as an engineer.

In 1892 Lewis went abroad, spending a few weeks in Russia. In 1897 a second trip to Europe was made, with the special purpose of studying laboratory methods and the Portland cement industry. He inspected a number of plants in England, Belgium, Germany, and France, a series of descriptive articles on the Portland cement industries in these places resulting from the trip. These articles were published in the New York *Engineering Record*, and are to appear in book form.

Lewis has written many valuable technical articles and discussions for the American Society of Civil Engineers and for various technical journals,—the *Engineering Magazine*, the *Engineering Record*, *Municipal Engineering*, and many other similar periodicals. His "Bridge Specifications" have been adopted by the standard work on "Modern Framed Structures," by Professor J. B. Johnson. He has held the post of non-resident lecturer at

the University of Wisconsin. He designed and built the steel frame building in Philadelphia for the S. S. White Dental Company.

Lewis is a member of the American Society of Civil Engineers, of the Engineers' Club of Philadelphia, and of the International Association for Tests of Materials, and is a contributor to the proceedings of the two first-named societies. He was also a charter member of the Engineers' Society of Western Pennsylvania, and of the Civil Engineers' Society of St. Paul at the time of his residence respectively in Pittsburg and St. Paul, and was also for some years a member of the University Club of Philadelphia.

Born, Philadelphia, May 14, 1858; parents, Henry M. Lewis and Frances Amelia Smith; married, November 2, 1882, Alice M. Law; children, Eleanor Stiles, Henry Martyn, Charles Frederick, Margaret Alice, and Marion. Residence, No. 239 West Chelten Avenue, Germantown, Philadelphia; business address, No. 406 Locust Street, Philadelphia.

HORACE COOPER LEX

LEX entered the Freshman Class, Department of Arts, as a partial student in 1874, and left during his Freshman Year.

Born, Philadelphia, March 7, 1858; parents, Charles Edwin Lex (Class of 1831) and Mary Murdock Casey.

JOSHUA BERTRAM LIPPINCOTT

LIPPINCOTT entered the Freshman Class in 1874 as a partial course student in the Department of Arts. He passed his examinations for the Sophomore Class, but before College opened, in the fall of 1875, decided to leave College and enter the publishing house of J. B. Lippincott & Co., of which his father was the founder and head. In a few years he was admitted to the firm, which has since become incorporated as the J. B. Lippincott Company, and of which he has been, since 1886, the vice-president.

He is treasurer of the Board of Managers of the Veterinary Hospital of the University of Pennsylvania; a director of the Bethlehem Iron Works and of the Philadelphia Academy of Music; and also a member of the Union League, Art, Philobiblon, Germantown Cricket, Bachelors' Barge, and Conanicut Yacht Clubs. He was a member of the Schuylkill Navy and of the Vesper Boat Club in 1879, 1880, and 1881; won junior singles in the Schuylkill Navy Regatta, June 19, 1880; and was in the winning senior gig crew in the regatta of June, 1881.

Born, Huntington Valley, Montgomery County, Pennsylvania, August 24, 1857; parents, Joshua Ballinger Lippincott and Josephine Craige; married, April 21, 1885, Joanna Wharton, daughter of the founder of the Wharton School of Finance and Economy in the University of Pennsylvania; children, Joseph Wharton, Marianna, Sarah, and Bertram. Residence, Logan Station, Pennsylvania; business address, No. 720 Filbert Street, Philadelphia.

WILLIAM KILBRETH LOWREY

A.B., LL.B. (Columbia)

LOWREY entered the Department of Arts in 1874, and left at the close of the Sophomore Year. He afterwards pursued his studies abroad, for six months at the University of Göttingen, for six months at the University of Leipzig, and in England for a year, at the last place passing the examinations for the University of Oxford, but not matriculating there. Returning to the United States, he entered Columbia College, New York, and was president of his class there in 1882, when he received his degree of Bachelor of Arts. He then entered the Department of Law in that college, receiving the degree of Bachelor of Laws in 1884.

Lowrey is at present and has been for some time past a member of the bar of Chicago.

Born, Cincinnati, Ohio, August 13, 1858; parents, Rev. Asbury Lowrey, D.D., and Isabella Guthrie; Residence, Evanston, Illinois; business address, No. 95 Dearborn Street, Chicago, Illinois.

HENRY GRATTAN McCARTER

Certificate of Proficiency (Science)

McCARTER entered the Senior Class as a special student in chemistry in 1877, and received a Certificate of Proficiency in June, 1878. He spent the year after graduation in post-graduate work in organic chemistry, under Dr. Sadtler, at the University, entering his father's mill, the Albion Print Works at Conshohocken, Pennsylvania, as chemist, in 1880. Here he remained until the works were closed in 1882. McCarter spent six months of 1883 in the employ of Eimer & Amend, manufacturers of chemical apparatus, New York City, as a salesman, later entering the establishment of J. T. Schantz, Berlin, Canada, manufacturer of vegetable ivory buttons, as color chemist.

In 1884 McCarter secured a position as a chemist at the John Farnum & Co.'s Works at Lancaster, Pennsylvania, where he remained until 1896, when Messrs. Pickhardt & Kuttroff sent for him to join their force in New York City as demonstrator of their dye-stuffs. This position took McCarter through all the milling

territory of the United States. In 1897, as the superintendent of the John Farnum & Co.'s Works felt the need of an assistant, he was recalled, and is at present filling this position.

McCarter has published several hand-books on subjects connected with his work, among them being "The Manufacture and Coloring of Vegetable Ivory," "The Renaissance of Madder," "The Influence of Lead Salts in Alumina Mordants for Turkey-Red."

McCarter is a member of Phi Kappa Psi and of the Hamilton Club.

Born, Philadelphia, October 13, 1856; parents, James McCarter and Sarah Elizabeth Coolidge; married, November, 1892, Elizabeth McGovern; children, Rosemary, Elizabeth, and James Coolidge. Residence, Lancaster, Pennsylvania; business address, Conestoga Mills, Lancaster, Pennsylvania.

EDWARD GARRETT McCOLLIN

A.M., A.B., LL B.

McCOLLIN entered College in 1874 as a Freshman in the Department of Arts. Immediately upon graduation he began the study of the law in the office of Joseph R. Rhoads, Esq., matriculating, in the fall of 1878, in the Law School of the University, from which he was duly graduated in June, 1880. In the same month he was admitted to the bar of Philadelphia, and has practised law in that city since that time. In 1881, when the degree of Master of Arts was conferred upon those of the Class who qualified by the presentation of satisfactory theses, he was selected to deliver the Master's Oration, but was unable to perform this duty because of serious illness.

During his studies in the Law School, McCollin continued his membership in the University Glee Club, where he had been active during his course in College, and of which he acted as leader during the seasons of 1878–79 and 1879–80. In April, 1879, he wrote the music of "Ben Franklin, Esq.," to words by Charles I. Junkin, '77. McCollin also continued his studies in

the theory of music and composition in the Department of Music of the University, receiving therefor a certificate from the College Faculty at the commencement in June, 1879. From 1880 to 1890 he was organist and choir-master at the Central Presbyterian Church, Philadelphia. He joined The Orpheus Club, of the same city, in 1880, of which he is still a member, as also are Church and Rowland.

At various times since graduation he has acted upon the Advisory Committee of Alumni, selected to assist the Glee and Musical Clubs, and in 1896 was the chairman of the committee appointed by the Glee Club to edit and publish the first edition of "Pennsylvania Songs." In 1893 he wrote, for the Glee Club, to words by E. W. Mumford, '89, the music of "The Pennsylvania Girl," which has been received by the undergraduates into the body of University songs.

The selection of "Adeste Fideles" as the tune for the University Hymn, and of the Russian National Anthem as the tune for a secular hymn for the University's use was made by Church and McCollin in 1895. Words for the former were written by Dr. Thomas Wistar, '63, and for the latter by Mr. E. M. Dilley, '97; and the two hymns have since been used at commencement and other public functions of the University. McCollin has written a number of songs and choruses for male, female, and mixed voices, sacred and secular, which have been published by Schirmer, Ditson, Boner, and others under the *nom de plume* of Garrett Colyn.

He has been, since graduation, with the exception of two years, a member of the Board of Managers of the Society of the Alumni (of the College); and was one of the organizers, in 1895, of the General Alumni Society, being a member of its first Board

of Directors. From 1887 to 1891 he was treasurer and a member of the Board of Directors of the Athletic Association of the University, serving for three years of this time on the Rowing Committee.

McCollin is a member of Phi Kappa Psi, of the University Club of Philadelphia, of the Houston Club, of the Society of the Alumni (of the College), of the Alumni Society of the Law Department, of the General Alumni Society, and of the Manuscript Music Society of Philadelphia. He is one of the directors of the Merchants' Trust Company and of the Musical Fund Society of Philadelphia, and secretary of the vestry of the Memorial Church of St. Paul, Overbrook. He has also been a member of the Manuscript Music Club of New York, of the Art Club of Philadelphia, and of the Faculty Club of the University. He was for several years one of the Committee of Management of the Central Branch of the Young Men's Christian Association of Philadelphia, and is at present a member of the Advisory Board of the University Branch of the same Association. In 1895 McCollin acted as chief marshal at the first celebration of University Day (February 22) at the Academy of Music. He was also a member of the first Commencement Week Committee, in 1894.

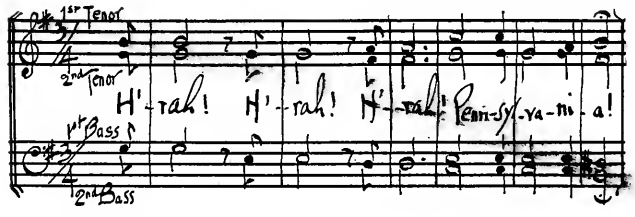
Born, Baltimore, Maryland, July 6, 1858; parents, Philip Garrett McCollin and Asenath Lewis Bromley; married, October 28, 1891, Alice Graham Lanigan; children, Frances, born October 24, 1892, and Katharine Williams, born February 5, 1894. Residence, Overbrook, Pennsylvania; business address, No. 514 Walnut Street, Philadelphia.

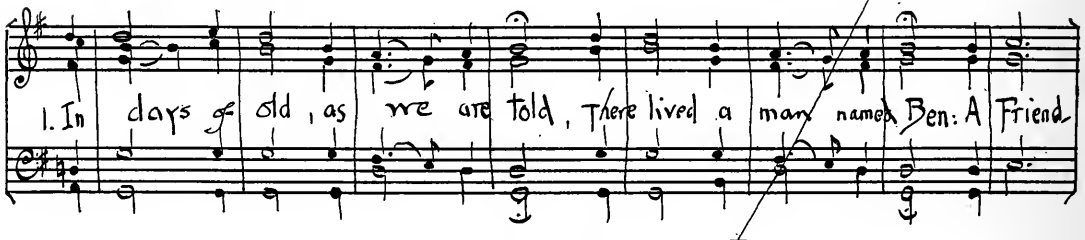
"Ben Franklin was his name,
And not unknown to fame,
The Founder first was he
Of the Universitee."

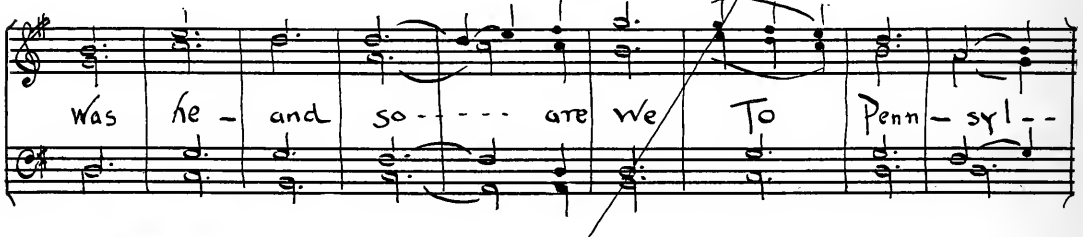
BEN FRANKLIN ESQ.

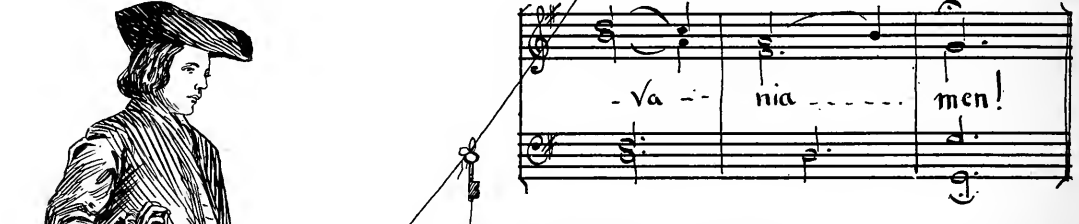
Edw.d J.m McCollin

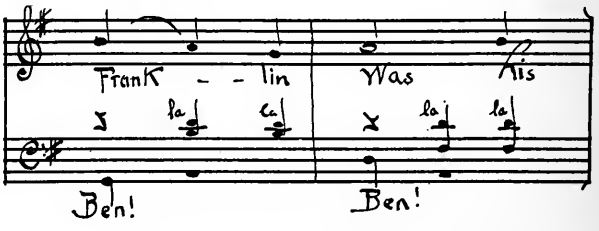
For male Voices

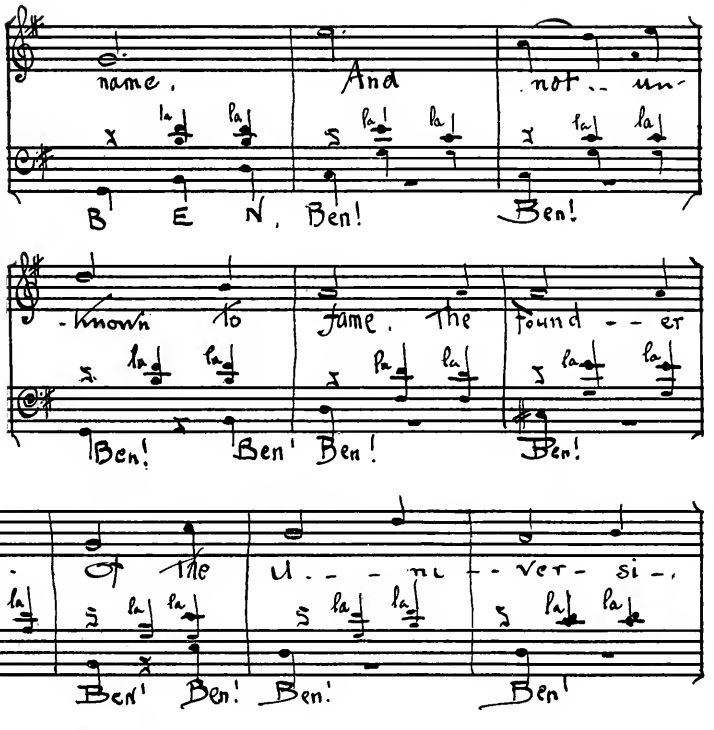












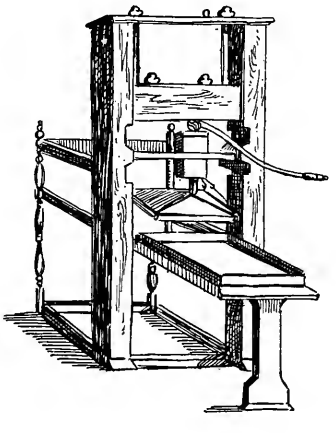
4. And then it grew as acorns do,
To be a mighty tree:
And Ben-ja-min since then has been,
Of great ce-leb-ri-tee.

2 A ready blade, he often made
Ingenious little toys.
He built a kite, with great delight
And shocked the little boys!

5. And now we raise our song of praise
To good old Father Ben:
A friend was he, and so are we—
To Penn-syl-va-nia men!

3 This ancient squire did then aspire
A public school to found:
And with a dash, he raised the cash
And bought a lot of ground.

Words by
Charles I Junkin, '77



MICHAEL McCUE

McCUE entered College in 1874 as a student in the Scientific Department, and left at the close of his Freshman Year, since which time he has been engaged as a telegraph operator and railroad station agent. Since 1890 he has held the position of train despatcher with the Barclay Railroad Company, a branch of the Lehigh Valley system.

He is a member of the General Alumni Society.

Born, Towanda, Bradford County, Pennsylvania, July 20, 1854; parents, Patrick McCue and Bridget McNulty. Residence and business address, Towanda, Pennsylvania.

HARRY McDOWELL

A.B., A.M.

McDOWELL matriculated in 1874 as a Freshman in the Department of Arts. His degree of Master of Arts was received from his Alma Mater in 1881. Immediately after graduation he became a candidate for Holy Orders in the Protestant Episcopal Church in the diocese of New Jersey, and was ordained as deacon in St. Mary's Church, Burlington, on September 12, 1880. He was graduated at the General Theological Seminary of the Protestant Episcopal Church in New York City in 1881, and was transferred to the diocese of northern New Jersey (now Newark) on October 17, 1881, where he was ordained priest.

He was assistant minister at the Church of the Ascension in New York City during 1880 and 1881; of St. Mark's Church, Orange, New Jersey, from 1881 to 1883; and of St. Mark's Church, Philadelphia, from 1883 to 1886. He was rector at St. John's Church, Chew's Landing, New Jersey, from December 14, 1886, until May 7, 1887. He served as assistant at the Church

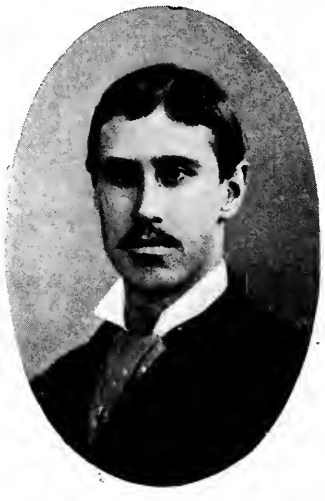
of the Annunciation, Philadelphia, from 1887 to 1889, and was recalled as rector by St. John's Church, Chew's Landing, New Jersey, in 1889. In January, 1890, he was called to be rector of Trinity Church, Asbury Park, New Jersey, and had just entered upon his duties in that parish when he was seized with influenza and died after a few days' illness.

Bishop Scarborough writes of McDowell as follows: "On January 26, 1890, I read the service for the burial of the dead over his mortal part in St. John's Church, Camden. And so ended the brief life and ministry of a young man who was extraordinarily gifted and wonderfully fitted for his work. I knew him from his boyhood and never found anything in him to blame. He was a good scholar, a rare musician, and a man of clear head and good judgment."

In collaboration with the Rev. H. G. Batterson, D.D., he published a book on church music, "A Manual of Plain Song for the American Church," which has attained considerable celebrity.

He was a member of Phi Kappa Psi.

Born, Camden, New Jersey, July 24, 1855; parents, Thomas McDowell and Mary Baker Adams; married Julia Joy Farr; children, two; died, Asbury Park, New Jersey, January 19, 1890.



EDWARD SHIPPEN McILVAINE

Certificate of Proficiency (Arts), M.D.

McILVAINE entered the Department of Arts as a Freshman in 1874, and at commencement, 1878, received a Certificate of Proficiency as a special student in Arts. In the fall of 1878 he entered the Department of Medicine of the University, was graduated therefrom in 1881, and practised medicine in Philadelphia for a few years, when he was compelled to go to Colorado on account of ill health, succumbing to his malady in Denver, 1886.

He won the intercollegiate championship in the graduate mile-walk at Mott Haven in 1879.

Born, Philadelphia, February, 28, 1858; parents Alexander Murray McIlvaine (Class of 1832) and Mary Cowperthwaite Olden; died, Denver, Colorado, June 10, 1886.

HENRY ALBERT MacKUBBIN

A.B.

MacKUBBIN entered the Freshman Class of the Department of Arts in 1874. After leaving College he entered the Theological Seminary at Princeton, New Jersey, but was compelled by ill health, at the end of his first year there, to take a year's rest, during which time he was engaged in private teaching. Returning to the Seminary later, he was graduated therefrom in 1882, and was licensed to preach by the Presbytery of Philadelphia North. On June 1, 1882, he was ordained to the ministry, and the same day was installed pastor of Grace Presbyterian Church, Jenkintown, Pennsylvania. MacKubbin continued in the pastorate of this church until March 1, 1886, when he accepted a call to the Presbyterian Church at Coatesville, Pennsylvania, where he remained for nine years. From April, 1895, to May 1, 1898, he was pastor of Westminster Presbyterian Church, Elizabeth, New Jersey, which charge he resigned in the spring of 1898 to spend a half-year in European

travel. This was MacKubbin's second trip abroad, as he had spent three months in Europe during 1889. Immediately after his return from abroad MacKubbin was called to the pastorate of the First Presbyterian Church at Lambertville, New Jersey, where he is at present.

MacKubbin has been very active in church work, having held the positions of moderator of the Chester Presbytery, moderator of the Elizabeth Presbytery, commissioner from the Chester Presbytery to the General Assembly of the Presbyterian Church, held at Washington, D. C., 1894, at which the famous "Briggs Case" was settled, and having been frequently chosen to represent his Presbytery at the Synod.

He is a member of the Phi Kappa Psi Fraternity.

Born, Philadelphia, September 2, 1856; parents, Charles MacKubbin and Teresa Marie Newlande; married, April 19, 1883, Susan Adelaide Peters; children, Mary Elizabeth, born December 24, 1890, and Donald Newlande, born Febuary 16, 1894. Residence, Lambertville, New Jersey.

SAMUEL AUGUSTUS MARTIN

MARTIN entered the Freshman Class of the College, Scientific Department, in 1874, and left during his Sophomore Year. He then entered Pierce's Business College of Philadelphia, and after graduation therefrom entered the employ of John B. Stetson & Co., Hat Manufacturers, of the same city, with whom he remained for two years. After leaving Stetson & Co., Martin had three years' experience as a sales agent, followed by his entrance upon a business career in partnership with his father. This venture proving not entirely successful, Martin, in 1886, entered the employ of the Midvale Steel Works as a clerk, and since that time has remained in the employ of that company, and by successive promotions has attained to his present position of "engineer of tests."

Martin's principal interest, outside of business has been the National Guard of Pennsylvania, which he joined in the fall of 1880, entering the First Regiment as a private in Company K on October 4 of that year. He was appointed corporal in the same

company on June 8, 1882; sergeant on June 30, 1883; and first sergeant on March 4, 1885. At Martin's own request he was reduced to the ranks on February 7, 1886, being reappointed corporal on June 30, 1889, and reappointed sergeant on June 17, 1891. He was elected second lieutenant on July 20, 1891, serving in this capacity during the Homestead riots in July, 1892. He was re-elected to this position on July 20, 1896. At the outbreak of the Spanish War, when the National Guard of Pennsylvania was reorganized, the First Regiment of the Guard becoming the First Regiment of Pennsylvania Volunteers, Martin was commissioned as a second lieutenant therein May 12, 1898, receiving his promotion to the first lieutenantship on July 1, 1898. While at Chickamauga Park Martin acted at various times as battalion adjutant and ordnance officer of his regiment.

He was detailed as acting quartermaster in the medical department, and assigned to duty with the reserve hospital of the First Army Corps on July 12, 1898, sailing with the division from Newport News, Virginia, with the army of invasion of the island of Porto Rico, on the United States transport "Massachusetts." He returned to the United States from Porto Rico on sick leave on September 26, 1898, rejoining his regiment in time to be mustered out, just a month later, on October 26, 1898. Martin secured a seven-days' leave from his regiment in June, 1898, returning to Philadelphia to be married.

Born, Philadelphia, July 11, 1858; parents, William Satchell Martin and Mary E. Winchester; married, June 15, 1898, Rebecca Kenworthy. Residence, No. 4441 North Uber Street, Philadelphia; business address, Midvale Steel Works, Nicetown, Philadelphia.

CHARLES FREDERICK MOORE

B.S.

MOORE entered College in 1874 as a Freshman in the Scientific Department. Since leaving College he has been occupied in the United States Coast and Geodetic Survey, as a railroad draughtsman, and as a sanitary, hydraulic, and railroad engineer. He has been in charge of various railroad surveys, made for location and construction, and has occupied the position of engineer of maintenance of way and structures of the Pennsylvania and Northwestern Railroad Company.

Moore is a member of the College and General Alumni Societies, and of the Engineers' Club of Philadelphia.

Born, Philadelphia, September 28, 1855; parents, Charles Deal Moore and Annie Thompson Millick; married Louisa Matilda Steck. Residence and business address, Bellwood, Blair County, Pennsylvania.

JOHN HASSINGER MURPHY

Certificate of Proficiency (Science)

MURPHY entered the Freshman Class in 1874, and received a Certificate of Proficiency in mining engineering in June, 1878. After graduation he spent several months travelling through Europe with Helme, Norris, and Elwell. On his return he became a civil engineer, holding the successive positions of assistant supervisor, supervisor, and assistant engineer with the Pennsylvania Railroad, entering the service of that company in 1879 and remaining in its employ until February, 1894. He afterwards opened an office as consulting engineer at Reading, Pennsylvania.

He was a member of Delta Psi and of the College Alumni Society.

Born, Philadelphia, December 25, 1857; parents, John Gamble Murphy, M.D. (Class of 1842, College and Department of Medicine), and Eliza Hassinger; married, December 6, 1883, Anna Mahony Rutter; died, Wilmington, Delaware, December 25, 1897, on the fortieth anniversary of his birth.

WILLIAM HENRY NORRIS

Certificate of Proficiency (Science)

NORRIS entered College in 1874 as a Freshman in the Scientific Department, and received a Certificate of Proficiency in mechanical engineering in June, 1878. After graduation he spent ten months in foreign travel with Helme, visiting the principal cities of Europe and some parts of Egypt and Syria. In the fall of 1879 he and Rutter commenced professional life in Philadelphia as "expert mechanical engineers, draughtsmen, and solicitors of patents." Two years later Norris decided to try stock-broking as a career, and after nearly three years' experience in this work returned to his original profession, that of a mechanical engineer. In 1882 he again went abroad. He was employed by the Franklin Institute of Philadelphia in various positions during the Electrical Exhibition of 1884 and the Novelties Exhibition of 1885, and also during a series of tests of electrical lamps and dynamo machinery conducted by the Institute during the winter and spring of 1884–85. In the spring of 1886

Norris became instructor in the mechanical school of the Spring Garden Institute of Philadelphia, which position he held until June, 1888. He then entered the employ of the Edison Electric Company of Philadelphia, and was inspecting engineer of their central station—then building at Ninth and Sansom Streets—until its completion, and also of the machinery during its installation, after which he was placed in charge of the station. He resigned from the Edison Company in September, 1889, entering the employ of the Franklin Sugar Refinery of the same city almost immediately. In the spring of 1890 Norris went to Stamford, Connecticut, with the Yale & Towne Manufacturing Company, where he remained until September of that year, when he resigned to accept a position with the firm of William Sellers & Co., of Philadelphia, as superintendent of their iron foundry. He has recently terminated his connection with Sellers & Co., in order to accept the position of Mechanical Engineer with the Pennsylvania Manufacturing Light and Power Company of Philadelphia.

Norris is a member of Delta Psi, the College Alumni Society, the Franklin Institute, and the University Club.

Born, Philadelphia, May 10, 1857; parents, William Norris and Anne Gilmour; married, June 22, 1881, Juanita Maria Estrada; children, William Henry, born February, 1883, possessor of the class cup, and Edward Wentworth, born October, 1888. Residence, No. 3237 Powelton Avenue, Philadelphia; business address, northeast corner Tenth and Sansom Streets, Philadelphia.

JOHN CURTIS PATTERSON

PATTERSON entered the Towne Scientific School of the University as a Freshman in 1874, and left during his Senior Year. He entered upon the active pursuit of his calling as a civil engineer in January, 1878, acting as rodman and levelman on the engineer corps of the Madeira and Mamoré Railroad in Brazil, South America, for a year. In April, 1879, he took the position of levelman on the engineer corps of the resident engineer of the Philadelphia and Reading Railroad, with head-quarters at Pottstown, Pennsylvania, where he remained until August, 1880, when he became transitman on the assistant engineer's staff of the Pennsylvania Railroad at Paoli, Pennsylvania. Here he remained only three months, when he went to Colima, Mexico, where he worked as rodman, levelman, transitman, and division engineer of the Mexican National Construction Company (the Manzanillo and Laredo Railway Company) until May, 1882. Patterson then returned to the United States, and in August, 1882, became assistant engineer of surveys for the Gettysburg and Harrisburg Railroad at Carlisle, Pennsylvania,

remaining there until March, 1883. A month later he was made division roadmaster on the Lebanon Division of the Philadelphia and Reading Railroad, holding this position for two years. From April, 1885, to October, 1887, Patterson was secretary and treasurer of the Philadelphia Drainage Construction Company (Limited), leaving this position to become assistant engineer in the chief engineer's office of the Philadelphia and Reading Railroad at Philadelphia. In November, 1888, he became assistant chief engineer and later chief engineer of the Poughkeepsie Bridge and Central New England and Western Railroad. In May, 1892, he became engineer in charge of the construction of the Quaker City Mortar Company's plant in Philadelphia, this work continuing until January, 1893. From February, 1893, to November of the same year Patterson was assistant chief engineer of surveys for the Baltimore and Cumberland Railroad at Hancock, Maryland, and since May, 1894, has been chief engineer of the Pittsburg and Eastern Railroad at Mahaffey, Clearfield County, Pennsylvania.

He is a member of the General Alumni Society, of Delta Psi and its graduate societies, the St. Anthony's Clubs of Philadelphia and New York, of the American Society of Civil Engineers, of the Engineers' Club, of the Philadelphia Gun Club, of the Germantown Cricket Club, of the Huntington Valley Country Club, and of the Devon Golf Club.

Born, Germantown, July 12, 1857; parents, Joseph Patterson and Lavinia Horstmann; married, April 29, 1886, Charlotte Dallas Morrell. Residence, No. 1230 Spruce Street, Philadelphia; business address, No. 204 Betz Building, Philadelphia.

THOMAS BARCLAY PRICHETT

A.B., A.M.

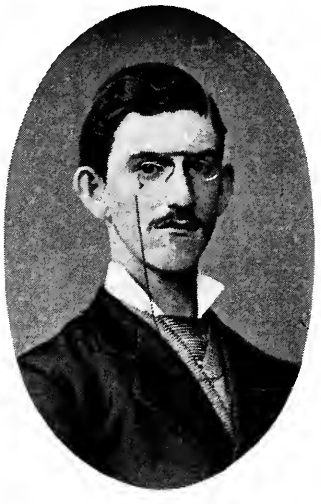
PRICHETT entered the Freshman Class, Department of Arts, in 1874. His Master's degree was conferred in 1881. Though graduating in 1878, it was not until the end of 1879 that Prichett decided what should be the nature of his avocation. He then determined to fit himself for a mercantile career, and after a course in a business college entered the office of Messrs. Arthur Hagen & Co., wholesale tobacco merchants, of Philadelphia, with whom he remained for ten years. On March 15, 1890, Prichett, finding that his liking for a commercial career lessened with his experience in it, associated himself with his brother, W. C. Prichett, Jr., and Adrian Worthington Smith, who were then practising the profession of architecture in Philadelphia, under the firm name of Smith & Prichett. On July 1 of the same year the firm became W. C., Jr., & T. B. Prichett.

Prichett has been active in politics on independent lines. He was for some time secretary of the Eighth Ward Independent

Republican Association of Philadelphia, and has been recording secretary and a member of the Board of Managers of the Municipal League since its inception, besides occupying the same offices in the ward organization of the same association.

Prichett is a member of the Philadelphia Chapter of the American Institute of Architects, of the University Club of Philadelphia, and formerly of the Belmont Cricket Club of the same city. He is a vestryman of St. Elisabeth's Church, and was for some time secretary of that body and a delegate from it to the Protestant Episcopal Convention of the diocese of Pennsylvania. He served for some years upon the Executive Committee of the South Philadelphia Centre, University Extension Society.

Born, Philadelphia, October 22, 1857; parents, William Cresson Prichett (Class of 1848) and Meeta Theresa Patrulló. Residence, Llanerch, Pennsylvania; business address, No. 424 Walnut Street, Philadelphia.



CHARLES FITHIAN REEVES

REEVES entered the Freshman Class in the Department of Arts in 1874, and left at the close of the Sophomore Year. After leaving College he followed mercantile pursuits until 1885. Since that time he has been assistant secretary of the Cumberland Mutual Fire Insurance Company of Bridgeton, New Jersey.

Reeves is secretary of the Bridgeton Hospital Association, chairman of the Building and Property Committee of the Board of Education, a member and, since April, 1897, the president of the Union Republican League of Bridgeton, and also a member and president of the Bridgeton Philatelic Association.

Born, Belvidere, New Jersey, April 13, 1856; parents, Rev. Henry Reeves, D.D. (Princeton), and Sarah Jane Kennedy; married, December 10, 1884, Clara Elizabeth Hoffman; children, Edmund Hoffman, Henry Kennedy, and Charles F., Jr. (the last-named deceased). Residence, Bridgeton, New Jersey; business address, P. O. Box 155, Bridgeton, New Jersey.

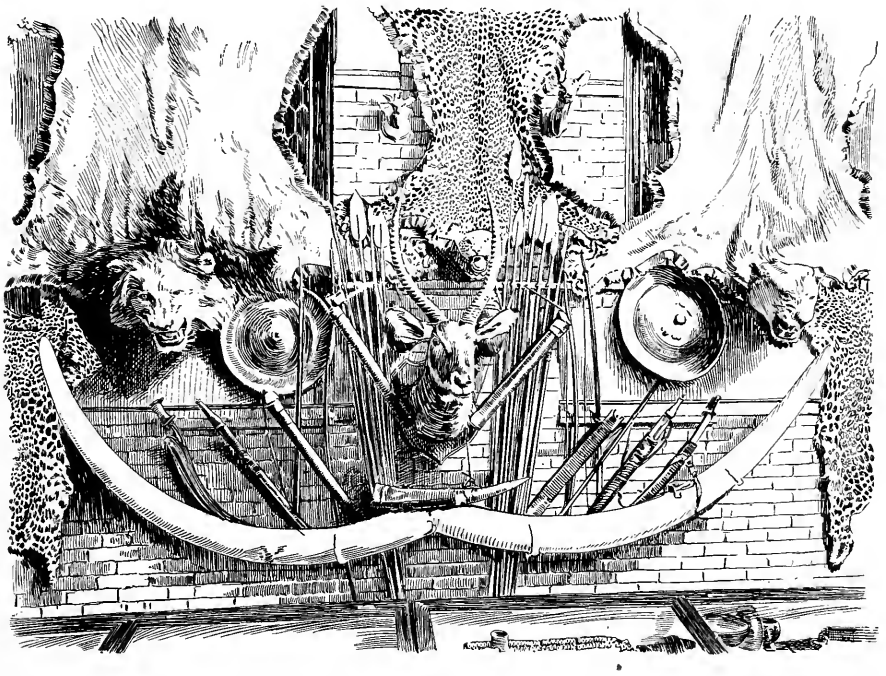
JAMES RENWICK RODGERS

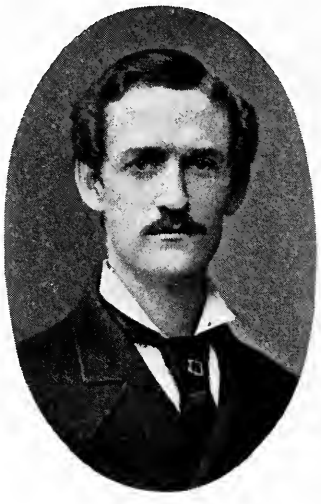
RODGERS entered College as a Freshman in the Department of Arts in 1874, and left at the close of his Sophomore Year. Entering upon a business career, he for a period of a few years acted in several capacities, including confidential clerk for a large manufactory, and in 1884 succeeded to his father's business, established for over sixty years (The James B. Rodgers Printing Company). He has printed the works of some of the most noted authors on history, art, theology, medicine, and law. He established a publishing department in connection with his printing works, and published a series of seventy-eight volumes of standard classics. Rodgers translated and published "Un Philosophe sous les toits" ("An Attic Philosopher"), by Emile Souvestre. He has travelled extensively north, east, and south.

Rodgers is a member of the Merion Cricket Club and a member of the first class, by inheritance, of the Military Order of the Loyal Legion, his father having been one of its original members.

Record of the Class of 1878, University of Pennsylvania

Born, Philadelphia, December 27, 1858; parents, James Boyer Rodgers, of New York City, and Mary J. MacBride; married, April 6, 1893, Louise Willard; children, Louise Willard and Isobel Willard. Residence, Merion, Pennsylvania; business address, No. 52 North Sixth Street, Philadelphia.





WILLIAM LEE ROWLAND

B.S.

ROWLAND entered College as a Sophomore in the Scientific Department in October, 1875, after a year's work in the Massachusetts Institute of Technology. After graduation he remained at the University for two years as assistant in the Chemical Department. In 1880 he was appointed to a fellowship in chemistry at Johns Hopkins University and was also appointed expert special agent for the chemical industry in the tenth census of the United States. In this latter work Rowland visited many chemical works throughout the country, as well as soda, salt, and sulphur deposits as far west as the Pacific coast. A result of this trip, in which he was accompanied by Helme, was the government publication in 1881 of Rowland's "Report on the Manufacture of Chemical Products and Salt in the United States." Since 1881 Rowland has been chemist and superintendent of the chemical works of Henry Bower & Son and their successors, the Ammonia Company of Philadelphia, and in this latter connection spent six months in California, examining

chrome iron deposits, and in 1882–83 several months in Great Britain, working on the extraction of cyanogen from coal gas, resulting in a process patented in 1891.

Rowland is a member of Phi Kappa Psi, of the College Alumni Society, of the Union League of Philadelphia, of the Orpheus Club of Philadelphia, of the Priestley Club of the University, of which he was the first president; of the Houston Club of the University, of the New England Society of Pennsylvania, of the American Chemical Society, of the Society of Chemical Industry of Great Britain, and of the American Gas Light Association.

Born, Springfield, Massachusetts, December 19, 1855; parents, Levi Perkins Rowland and Eunice Hall Lee; married, January 31, 1883, Clario Hobart; children, Ruth, born January 13, 1892, Edmund, born September 9, 1897, and Hobart, born December 12, 1898. Residence, No. 4800 Chester Avenue, Philadelphia; business address, Twenty-ninth Street and Gray's Ferry Road, Philadelphia.

AUGUSTUS JANNEY RUDDEROW

A.B., A.M., LL.B.

RUDDEROW entered the Freshman Class, Department of Arts, in 1874. After graduation he matriculated as a student in the Department of Law of the University, receiving, in 1880, the degree of Bachelor of Laws. In 1881 he received also the degree of Master of Arts. Since 1880 Rudderow has practised law in the city of Philadelphia. He acted as Class secretary from 1878 to 1898.

He is a member of the College Alumni Society, and was a vice-president of the Law Academy of Philadelphia.

Born, Philadelphia, August 11, 1857; parents, Rev. Joel Rudderow (Class of 1845) and Catharine Mary Janney. Residence, No. 1832 Arch Street, Philadelphia.

STEPHEN FOTTERALL RUSSELL

RUSSELL entered the Freshman Class in the Department of Arts in 1874, and left during the second term of his Sophomore Year. From 1876 to 1880 he resided in Philadelphia, acting as clerk in a wholesale cotton house. In 1880 he went to New York City, where he established himself in business as a member of the New York Cotton Exchange, maintaining his connection therewith until his death in 1895.

He was a member of the Hamilton Club of Brooklyn, New York; of the Brooklyn Whist Club, of the Atlantic Yacht Club, and of Brooklyn Lodge, Free and Accepted Masons.

Born, Philadelphia, June 22, 1858; parents, Winfield Scott Russell and Catharine Summers Fotterall; married Sophia West Levis; died March 1, 1895.

CHARLES ALFRED RUTTER

Certificate of Proficiency (Science)

RUTTER entered the Freshman Class in 1874 as a regular student in the Scientific Department. In 1877 he became a special student in mechanical engineering, receiving, at the end of the course in 1878, a Certificate of Proficiency. Since leaving College he has lived in Philadelphia and vicinity, following the profession of solicitor of patents and mechanical engineer. He is a most capable yachtsman, having spent much of his leisure time since early boyhood on the bays and rivers of the eastern part of the United States. He has travelled for business and pleasure through several of the Southern States.

He is a member of the College Alumni Society, of Delta Psi, of the Franklin Institute of Philadelphia, of the Historical Society of Pennsylvania, of the Military Service Institution of New York, and of the University Club of Philadelphia. He was for many years connected with the National Guard of Pennsylvania, and

has held the following rank in its service: first lieutenant and inspector of rifle practice in the Second Regiment Infantry, National Guard of Pennsylvania, May, 1891; first lieutenant and quartermaster in the same regiment, 1895. He enlisted in the service of the United States during the Spanish-American War, 1898, and held rank as follows: first lieutenant and quartermaster in the Second Regiment Infantry, Pennsylvania Volunteers.

Born, Philadelphia, October 30, 1857; parents, Clement Stocker Rutter, Jr., and Anna Jackson Mahony. Residence, Holly Oak, Delaware; business address, No. 411 Walnut Street, Philadelphia.

JOHN MORIN SCOTT

SCOTT entered the Freshman Class, Department of Arts, in 1874, and left during his Senior Year. He studied law, and was admitted to the bar of Philadelphia on November 12, 1881, since which time he has been in active legal practice in that city. He was elected a member of the Eighth Section School Board, serving for two consecutive terms. He was elected to the House of Representatives of the Commonwealth of Pennsylvania in 1887, and again in 1889. He was not a candidate in 1891, but was re-elected in 1893 to represent the district which he had previously represented. He was again re-elected in 1895 and again in 1896. In November, 1898, he was elected to the Senate of the State.

Scott is a life member of the Pennsylvania Society, Sons of the Revolution.

Born, Philadelphia, September 19, 1858; parents Lewis Allaire Scott (Class of 1838) and Frances Anna Wistar; married Anna F. Barker. Residence, No. 118 South Eighteenth Street, Philadelphia; business address, No. 623 Walnut Street, Philadelphia.

RICHARD BOWDEN SHEPHERD

A.B., A.M.

SHEPHERD matriculated as a student in the Department of Arts in 1874, coming in with the Freshman Class. After graduation he entered the Berkeley Divinity School at Middletown, Connecticut, graduating therefrom in 1881. He was ordained as deacon in the Protestant Episcopal Church in 1881, and as priest in 1882. During the years of 1881 and 1882 he was assistant and from 1882 to 1885 rector of Trinity Church, Oxford, Philadelphia; from 1885 to 1892 rector of the Church of the Advent, Philadelphia; and since 1893 rector of Christ Church, Riverton, New Jersey. In addition to his parish work in Riverton, Shepherd is an examining chaplain of the diocese of New Jersey, and president of the Free Library Association of Riverton, and also of the local centre for university extension work, both of which organizations he was in part instrumental in forming. He is also a trustee of St. Mary's Hall and Burlington College, Burlington, New Jersey.

Shepherd published the "Semi-centennial History of the Church of the Advent," Philadelphia, in 1890.

He is a member of the College and General Alumni Societies.

Born, Yonkers, New York, September 22, 1858; parents, Solomon Shepherd and Frances Maria Henop; married, June 14, 1888, Rebecca McMurtrie Waln. Residence, Riverton, New Jersey.

ISAAC SCOTT SMYTH, JR.

A.B., A.M.

SMYTH was admitted to the Freshman Class in 1874 as a student in the Department of Arts. Since leaving College his pursuits have been entirely mercantile. In the latter part of 1878 he entered the employ of Young, Smyth, Field & Co., wholesale notion merchants, of Philadelphia, of which firm his father was a member.

He is a member of the College Alumni Society.

Born, Philadelphia, December 1, 1859; parents, Isaac Scott Smyth and Katharine Mason; married, January, 1888, Eliza F. Carrigan; children, Isaac Scott and Gordon Seymour Carrigan. Residence, No. 277 Harvey Street, Germantown, Philadelphia; business address, Tenth and Market Streets, Philadelphia.

WILLIAM HENRY STETLER

A.B., A.M., LL.B.

STETLER entered the Department of Arts as a Freshman in 1874. After graduation he matriculated as a student in the Law School of the University, from which he received the degree of Bachelor of Laws with the Class of 1880. He was admitted to the bar of Philadelphia in 1880, and practised law in that city until his death in 1887.

In 1882 he was treasurer, and in 1883 vice-president, of the Law Academy of Philadelphia.

Born, Philadelphia, April 27, 1858; parents, John Geyer Stetler, M.D., and Ann Maria Schively; died near Grantville, Georgia, on train returning to Philadelphia, May 8, 1887.

JOHN ALEXANDER TEAZ

TEAZ entered the Freshman Class, Department of Arts, in 1874, and died while in college, at the close of the Sophomore Year.

Born, Philadelphia, June 16, 1854; parents, John Teaz and Elizabeth Pearson; died, Philadelphia, June 11, 1876.

AUGUSTUS THOURON

THOURON entered College as a Freshman in the Scientific Department in 1874, leaving at the close of his Freshman Year to go into business as a stock-broker. For a number of years prior to his death in 1899 he was a member of the firm of N. Thouron & Co., of Philadelphia.

He was a member of the College and General Alumni Societies, of the Houston Club, and of the Philadelphia Club.

Born, Philadelphia, March 8, 1857; parents, Elisha Henry Thouron and Margaret Murphy; died, Philadelphia, May 21, 1899.

THOMAS EARLE WHITE

WHITE entered the Sophomore Class, Scientific Department, in 1875, and left at the close of his Sophomore Year to begin the study of law in the office of the Hon. George M. Dallas. He was a student in the Law Department from 1876 to 1878, and since that time has practised his profession in his native city.

He has served as one of the Board of Governors of the Art Club of Philadelphia, been president of the Athletic Club of the Schuylkill Navy, and is also a member of the Pen and Pencil Club, of the Lawers' Club, of the Philadelphia Barge Club, of the "Wheel," and of various other social organizations of Philadelphia.

Born, Philadelphia, November 18, 1857; parents, Richard P. White and Caroline Earle; married, February 10, 1880, Martha Campion Stockton (died September 3, 1883), and December 13, 1897, Harriet L. Brown. Residence, No. 2029 Locust Street, Philadelphia; business address, Nos. 1201–1204 Stephen Girard Building, Philadelphia.

NELSON OLIVER WHITNEY

B.S.

WHITNEY entered the Freshman Class, Scientific Department, in the second term, the spring of 1875. After the Senior examinations he and Lewis at once went to work on the United States Coast and Geodetic Survey, coming in from the field to receive their diplomas at commencement, June, 1878. The summer was passed by the men together in the same work, their field being eastern Pennsylvania and their duties to heliotrope from high exposed elevations on bright days. During the following winter and spring Whitney taught at the Pennsylvania Museum and School of Industrial Art, and at the University, assisting Professor Haupt. This work continued until after Whitney's appointment, in May, 1879, as draughtsman in the chief engineer's office of the Pennsylvania Railroad. After serving an apprenticeship in this office, Whitney was assigned to the construction of a new branch of the same company up the Monongahela River to Brownsville, Pennsylvania, where he worked for a year, until the completion of the line. In November, 1880, in company with a score of engineers from all parts of the

United States, Whitney left New York City on the Vera Cruz steamer, bound for Old Mexico, to take part in the location and construction of the Mexican National Railroad, comprising about eighteen hundred miles of line. This enterprise occupied about fifteen months. While in Mexico Whitney made the ascent of Mount Popocatapetl, one of the highest peaks on the North American continent. After his return home he spent the four years from 1882 to 1886 as locating and resident engineer on the construction of the South Pennsylvania Railroad between Harrisburg and Bedford, Pennsylvania. This road was the second line in the United States projected as a double-track trunk line, and necessitated some heavy work, including the Tuscarora tunnel, one mile in length, which was on his division. The years 1886 to 1891 Whitney spent in Chicago, where, as assistant to the chief engineer of the Pennsylvania Company, he constructed three short lines,—the Calumet River Railway, the South Chicago and Southern Railway, and the State Line and Indiana City Railway,—having general charge of the engineering at the Chicago end. In the spring of 1891 Whitney accepted the chair of civil engineering at the University of Wisconsin, his special subjects being Railroads and Transportation. In the interests of this professorship, which he still retains, he spent three months of the summer of 1897 travelling in England and France, inspecting the docks, railroads, freight yards, and ship canals of these countries. He has been engaged as an expert in numerous cases of railroad damages and of water rights, recently acting in that capacity for the South Dakota Railroad commissioners. He contributes occasional articles to technical journals.

Whitney is a member of the General Alumni Society, of the American Society of Civil Engineers, first vice-president of the

Western Society of Engineers, member of the Western Railway Club, of the Society for the Promotion of Engineering Education, and of the Science Club of the University of Wisconsin.

Born, Aiken, South Carolina, May 3, 1858; parents, Alexander Nelson Whitney and Elvira Augusta Smith; married, June 12, 1883, Mary E. Tainter; children, Helen G., Alden Bradford, May P., Edward N., and Alice. Residence, Madison, Wisconsin; business address, University of Wisconsin, Madison, Wisconsin.

Mood

THE day breaks dim through veils of cloud,
Grayly fortelling a storm;
Then white flakes fall, whose circles all
Seem flights of spirit form.

And I dream till my soul floats out with them
On the surge of the eastern wind,
And eddying sails through life's dull pales,
Leaving my care behind.

O'er wastes of snow, through hemlocks black
Aimlessly floating free,
At last I sink at a streamlet's brink
Merged in drifting sea.

Yet keeping, alas! a consciousness
Of that I have left behind,
That binds my will with a numbing chill
Bleaker than Winter's wind.

Is Death, then, but half forgetfulness?
Can the weight of a soul's despair,
The aching strife of a weary life,
Outlive the clay left there?

Can grief last on to the farther life,
And trouble the dead ghost chill?
With curious pain life throbs again
Through my soul that is dreaming still.

Henry A. Ingram.

1887.

In Memoriam

AND shall we mourn for them? Amid the surge
Of changes, and the onward flight of years,
Shall Memory refuse a fitting dirge
Or truer tribute of her silent tears?

Yet, selfish is the grief that mourns the dead:
Lost to the world, but gathered to their God,
Each mounting spirit to its home hath fled,
And all their grossness mingles with the sod.

Charles Philip Henry.

Necrology

JOHN ALEXANDER TEAZ
Died June 11, 1876

WILSON DARLING CRAIG
Died March 12, 1877

HENRY HOWARD HOUSTON, JR.
Died May 13, 1879

EDWARD SHIPPEN McILVAINE
Died June 10, 1886

WILLIAM HENRY STETLER
Died May 8, 1887

HARRY McDOWELL
Died January 19, 1890

JAMES CHALICE CRAVEN
Died March 25, 1893

WILLIAM PRATT BREED, JR.
Died February 12, 1895

STEPHEN FOTTERALL RUSSELL
Died March 1, 1895

JOHN CASSIN
Died June 8, 1897

JOHN HASSINGER MURPHY
Died December 25, 1897

AUGUSTUS THOURON
Died May 21, 1899

Houston Hall

"Office of the Provost,
"Philadelphia, April 20, 1899.

"DEAR MR. McCOLLIN,—In response to your request, I send you the following brief statement of how Houston Hall came to be built:

"In the winter of 1893–94 I was upon the grounds of the University upon a Sunday afternoon. I noticed that one of the rooms in College Hall was brightly lighted. Not understanding for what purpose such a room could be used on Sunday, I went into College Hall and up-stairs to the room in question. I found that a group of University students was holding a Sunday afternoon service. They had a piano and singing, and one of the students made an address, during which he spoke of the great lack of, and the great need at the University for, a place which the students could have for themselves.

"This meeting led to a larger one, in the rooms of the Young Men's Christian Association, on Woodland Avenue. I attended this meeting, as well as a general meeting in the College Chapel. Up to this time the discussion was all in the direction of a Young Men's Christian Association building. Some pledges for such a building were made. The whole question became so interesting, and so many people were set to thinking about it, that it was not long before many suggestions began to come in, making the subject immediately much more comprehensive.

"Upon the evening of February 15, 1894, I sent a telegram to Mr. H. H. Houston, at his home at Chestnut Hill, telling him

HOUSTON HALL

that I was on my way out to see him. I told Mr. Houston of the precise condition of affairs at the University,—that there was no spot which the students could call their own ; that when they were not at a lecture or a recitation or in the laboratories, they were necessarily upon the streets. Mr. Houston immediately made a binding contribution of fifty thousand dollars. Notice was then given to all interested that suggestions would be gladly received as to the practical requirements of the whole student-body in the matter of a students' hall. When these were submitted it was at once seen that the sum already contributed would not erect a building upon the enlarged plans. The subject was again brought to the attention of Mr. Houston, and was followed by an immediate subscription of fifty thousand dollars additional in the name of Mrs. Houston.

"With this fund in hand, the preparation of plans was submitted as a prize contest to the students in our School of Architecture ; and the present elevation, with very little change, is the work of Mr. Frank Allison Hays.

"All of us will remember that not long after the corner-stone was laid, Mr. Houston died, after a few hours' illness. The equipment of the building, its furnishing, the swimming-pool, and other objects of student interest, not contemplated upon their plane of cost, drew upon the estate of H. H. Houston for a third contribution of fifty thousand dollars, and as the result we have Houston Hall of to-day.

"It was not until after the first contribution of fifty thousand dollars that it was decided to name the Hall after Mr. Houston's son, and thus make it a memorial to him ; then the thought came from the trustees, and not from Mr. Houston or his family. The gift was without any condition, and, although deeply gratified at

the suggestion to make the building a memorial, Mr. Houston said, in accepting the proposition of the trustees, that he wished it to be understood that his gift carried with it no obligation to associate either his name or that of his son with it.

"Professor Knight, of St. Andrews, Scotland, in writing to the *Edinburgh Scotsman* his views as to the several universities in the United States which he visited, speaks of Houston Hall as the most unique gift and the most important gift which came under his observation while in this country.

"Sincerely,

"CHAS. C. HARRISON."

The College Faculty of 1878

OF the seventeen professors who constituted the Faculty of the College on commencement day, June 14, 1878, six have died,—Dr. Krauth, the venerable vice-provost, in 1883; Professor McElroy, in 1890; Dr. Genth, in 1893; Professor Seidensticker, in 1894; Professor O. H. Kendall, in 1897; and Dr. E. Otis Kendall, in 1899. Each of the first-named three was still upon the active teaching staff of the College at the time of his decease; and Dr. Kendall, who succeeded Dr. Krauth as vice-provost in 1883 and retired in 1893, with the title of honorary vice-provost and honorary dean of the College Faculty, retained his seat in the Faculty, as Thomas A. Scott Professor of Mathematics, until the day of his death, when he terminated a forty-four years' tenure of the mathematical chair. Dr. Genth severed his connection with the University in 1888, and Professor Otis H. Kendall in 1889.

Professor Jackson and Dr. Barker are the only members of the old Faculty who remain upon the active roll of the University professors, Dr. Stillé, Emeritus John Welsh Centennial Professor of History, having resigned the provostship and retired from active service in the Faculty in 1880; and Dr. Lesley, who is now resident in Milton, Massachusetts, having retired in 1890 with the title of Emeritus Professor of Geology and Mining. Dr. Edgar F. Smith, now Professor of Chemistry at the University, was not a member of the Faculty at the time the Class of 1878 was graduated, although, as an assistant to Professor Genth, he was the active instructor in his department.

Dr. Muhlenberg, who now resides at Reading, Pennsylvania, resigned the professorship of Greek Language and Literature in 1888. Professor Marks resigned in 1889, and is now an electrical and dynamical engineer and expert in Philadelphia. Professor Richards, who resigned in 1891, is a practising architect in the same city, where are also Professor Sadtler, who resigned in 1891, and is now a consulting chemist and expert, and Professor Haupt, who resigned in 1892, and has since that time maintained an office as consulting civil engineer. Professor Thompson retired in 1892, and was shortly afterwards made president of the Central High School of Philadelphia. Dr. Koenig is now Professor of Chemistry and Metallurgy in the Michigan School of Mines, having resigned his chair at Pennsylvania in 1892.

The following letters are published by permission of the writers, and require no comment.

From Dr. Charles J. Stillé

"2201 St. James Place, April 23, 1899.

"Dear Mr. McCollin,—I look back with the greatest interest and satisfaction to the days I passed in my relations with the members of the Class of 1878. As I look over their names I am filled with pride when I remember how they have profited by the opportunities they had at College, not merely in acquiring knowledge, but of being trained for a higher field of usefulness than they are yet not old enough to occupy. They, as a body, I remember, during their residence were not only remarkable as students, but almost all of them were distinguished for those traits as gentlemen by which they are well-known to the wider circle who are now their judges.

"May I express the hope that they all may long live to pursue their true career as students and the living witnesses of the value of a University in such a community as this. With my kindest remembrances to each and every member of the Class, and my best wishes for their success in life,

"Very truly yours,

"

"E. G. McCollin, Esq."

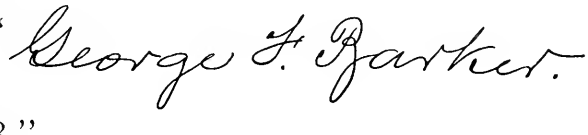
From Dr. George F. Barker

"University of Pennsylvania,
"Philadelphia, December 16, 1898.

"Gentlemen,—It is with great pleasure that I respond to the kind invitation of Mr. Rowland and send to you herewith my heartiest greetings on this, the twentieth anniversary year of your graduation. I have always recalled with especial satisfaction the work done by the Class of '78 in Physics. It was earnest and thorough, and, coming as it did so soon after my arrival in Philadelphia, it made a deep impression upon me. Hence I have followed the subsequent career of the Class with pride and satisfaction. And I beg leave, in sending you my congratulations, to express the hope that time may deal gently with all of you and that you may continue to be one of the brightest of the jewels in the coronet of your Alma Mater.

"Sincerely yours,

"



"To the Class of 1878."

From Professor Lewis M. Haupt

"DEPARTMENT OF STATE,
"NICARAGUA CANAL COMMISSION,
"PHILADELPHIA, December 17, 1898.

"MY DEAR ROWLAND,—It gives me great pleasure to acknowledge the receipt of your kind letter of the 10th inst. requesting me to favor you with a letter for publication in your Class record.

"My public engagements prevent my doing the subject justice at this time, and hence I can only convey my greetings to your members in a few words of commendation.

"Twenty years of business activity have made your Class a factor in the world, and no doubt many additions have been added to your number in this time in the shape of a promising posterity. These, too, I must regard with affection as my grandchildren, to whom I extend my best wishes. It gives me great pleasure to keep in touch with my University Alumni and to wish them all God-speed in the journey of life.

"Sincerely yours,

"Lewis M. Haupt."

"WM. L. ROWLAND, ESQ."

From Dr. George A. Koenig

"MICHIGAN COLLEGE OF MINES,
"HOUGHTON, MICHIGAN, January 29, 1899.

"MY DEAR FRIENDS,—You wish me to look back with you twenty years. To you this means looking into dawn, to me into the bright sunshine of life at mid-day. You have reached now

the zenith of your lives ; for me the shadows are growing long, as of an evening. It was a glowing life then, though not you nor I grasped its full import. Only when we look backward do the lost opportunities come into the right perspective. The routine of school-life had become irksome to you ; you yearned for the world of free action and enjoyment. For my own part I had just fully awakened to the fact that the most learned knew but little that was worth knowing—that all my future life would be or should be a struggle to get a little nearer to the inside of things. I do not now blame friend Helme for going quietly to sleep in a morning lecture on metallurgy or applied chemistry. It must have been to you verily as dry as Professor Dry-as-Dust's treatise on the History of Prussia, as Carlyle says in his Life of Frederick the Great. I am only surprised that he was the only one somniferously hypnotized by lead-lined tanks and Hasenclever's roasting furnaces. Indeed, from this way-down stand-point of life, I congratulate the rest of you for your wide-awakeness. Your true philosopher would find, at this point, a fine vantage for inquiry as to who was wiser in those days, Helme or the rest of you. Who has gotten a better berth now? But no, I am not a philosopher in this sense ; I will put it differently. Who has had the most satisfaction of his life, including his College days?

"For the satisfaction lies in the doing of what we like best to do, and doing it well, although the latter clause is included in the first, since we do that best for which our senses are most sharpened. In certain ways I was better acquainted with your class than I had been with any other before or have been with any since. I have lived a part of your college life with you as man with man. I have seen more of the men of '86 since their gradu-

ation than I have of you, but in student days I was more with you than with them.

"All of you I liked well, as younger brothers; you were first-rate boys, to put it tersely. To my present Western boys I am more of a father than a brother; I believe that I have come to be somewhat of a scolding parent, yet I know that they get the meaning of it, and like me no less for it. Did I ever scold you? Verily, I have forgotten all about it; nothing has remained in my memory but the most pleasant incidents, notably those of Phi Kappa Psi and our summer trips. But to come back to my thesis, you would like to know what I thought of you as individuals twenty years ago. No one of you has been hanged, which I may take as confirmation of my then high idea of you all as good fellows. But did I think that all of you were being benefited by courses of study in the University for which your natural equipments most fitted you? Or that you were all satisfied with your present and possible future employment? Not by a long shot. I regretted the narrowness of the University curriculum for the sake of several. We had not launched out into electives then, and if we had, there would not have been enough of them to go round for all the talent of the ring.

"Brother Helme I figured to myself as a bank-director or president as often as he went to sleep. What a pity that the glory of the Wharton School was not yet blazing over a non-statistical world. Would not Helme have been a shining light among the luminaries?

"Alas, poor Yorick! alas, poor Elwell! Thou genial sprite in the dreary toils of science! Thou seemest as a fish out of water. Thy brain was subtle, but what could blow-piping be to thee? And thou wentest from bad to worse. Ship-chandlering

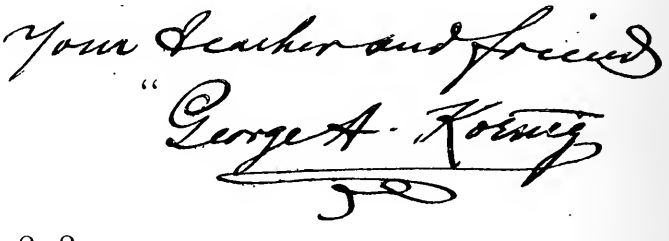
for such a spirit! Verily, thy fate was sad. I weep for thee! Poor Murphy is more indistinct in my memory. I seem to remember that I did not believe him cut out for an engineer. The look of a man's eye is tell-tale whether he is in his right place or not. His eye used to wander in the recitations, as if trying to catch up with some mischief. He would have perhaps been another Conan Doyle if misjudgment had not put him into an engineering way.

"Rowland, d'Invilliers, Church, and Lewis seemed in their proper element. No wandering of the eye, no sleepiness. I set them down as getting the tools ready for good work in the rightly chosen profession. And whilst you were thus sharpening your wits and had a good time over it, more or less, the present writer himself made the great mistake of his life, and you knew it not. I shifted from chemistry to geology, like a foolish boy who throws away a diamond for a piece of colored glass. For in geology the best man can do nothing that is really worth doing. I paid the penalty in losing the fourteen best years of my life. You are not yet too old but that this may be a warning to one or another of you. If you have found out what you are best fitted to do,—*i.e.*, what you like best,—then stick to it, whatever inducement be held out to drag you into something else.

"Let not the gold dazzle your sight, nor yet the despised silver, though it be the dollar of your daddies. The work is the satisfaction of life, and nothing else. I shifted back to my proper base in time to learn what I missed, yet not too late to get some real pleasure from it. When you meet this coming summer in Houston Hall on commencement day, think that my mahatma moves among you.

"What changes time brings! To think that Dr. Pepper's silvery speech will henceforth be absent from these occasions. Who will now urge you to part with hard-earned shekels in order to put more brick and mortar together? Poor Houston! when I walked through the stately Hall two years ago I thought of him. He was not in his element either as a student of engineering. Peace be to his ashes!

"With best wishes for all of you,



"To the Class of 1878,
"*University of Pennsylvania.*"

From Professor William D. Marks

"The Art Club of Philadelphia,
"December 19, 1898.

"My dear Church,—Thanks for your thoughtful courtesy.

"I fear that I have been so long away from the University that I have lost the power to write long or reminiscent letters. I have, however, a delightful recollection of those halcyon days, when, with my associated professors, I was engaged in the acquisition and imparting of knowledge. There it was not a distinction to be frank and honorable in all the relations of life; it was a matter of course, and a disgrace to think of being otherwise.

"But it is of the Class of '78 that you have asked me to speak. 'The race is not always to the swift nor the battle to the strong.' Yet, as I think that Class over,—Church, d'Invilliers,

Murphy, Rowland, Elwell, Norris, Helme, Rutter, and others of my section,—I cannot but feel that they were all men of good promise and that they have succeeded with a uniformity that is rarely met with.

"With sincere congratulations to the Class and the earnest wish that all good things of this world may come to you and to them, I am as ever

"Mark Twain

"Wm. M. Clark."

"To Arthur L. Church, Esq.,

"*For the Class of 1878,*

"*University of Pennsylvania,*"

From Dr. Frederick A. Muhlenberg

"Reading, Pennsylvania, April 12, 1899.

"My dear Mr. McCollin,—A favorable answer to your reasonable and politely expressed request cannot well be refused, but I fear that the disabilities of age, impaired memory and vision may prevent me from sending such a reply as will meet with your wishes or expectations.

"I recollect the surprise which the notice of my election to the Greek professorship in the University of Pennsylvania occasioned me; equally well the doubts I entertained of acceptance. The University had always been regarded by me with reverence, for many of my ancestors had received their education in its academic, collegiate, and medical departments, and the thought of being associated with so many distinguished professors, and especially of taking the place of such an erudite scholar as

Dr. Allen, and of having, in all probability, to be introduced to new and perhaps advanced modes of instruction, caused me some hesitation. The kind words of Drs. Charles Porterfield Krauth and Charles W. Schaeffer (who belong no longer to this sphere), but more particularly the considerate kindness and encouragement of Dr. C. J. Stillé (who is still alive and engaged in doing such excellent work for his beloved city and State in the wide domain of history), induced me to accept the important post. The gracious reception tendered me by your Class especially, and the other students of the University generally, cheered me in the commencement and progress of my work and enabled me to prosecute the labors connected with the position, pleasant though they were, with increasing confidence and satisfaction.

"I do not recall with precision all the members of your Class; the shadowy forms of most of them return, but the rest have passed out of my recollection. One whom I do not forget is Mr. McDowell, the originator of the voluntary Hebrew Class, of whom I could have wished 'sero redeat in cœlum.' I can assure you, my dear Mr. McCollin, that I still have, as I had then, a great regard for the Class. I recognize at this day the great ability of many of them, the gentlemanly conduct of them all, and that among them I had some very dear and intimate pupils. My intercourse with the members of your Class, as far as my memory serves me, was attended with nothing of an unpleasant nature during the two years I was with you, and it has given me pleasure to learn of the success and usefulness of the majority of them in the varied avocations of life, and of honorable ambition to which they have devoted themselves, and it will give me still greater pleasure to hear of their higher elevation in the future in their professions and business pursuits.

"You will please, my dear Mr. McCollin, as a worthy representative of your Class, give them these few details of life since my resignation from the University of Pennsylvania.

"Called providentially to Reading, I have here remained in quiet retirement. During the years of 1892 and 1893 I consented to act as temporary president of Thiel College, Greenville, Pennsylvania, until they should elect a permanent one. There I remained two years, not without useful results. Since that time I have continued to reside at Reading, acting as presiding officer of the 'Lutheran Pastoral Association' of that city, where, in mutual weekly intercourse and with different acquirements, we strive to prepare ourselves for the more efficient discharge of our duties and at the same time improve ourselves in Hebrew and Greek. This employment has been a constant source of delight to me and has kept alive my love for the great language, in which it was my privilege to instruct you during my connection with the University.

"With best wishes for the success of your publication, I remain,

"Your former professor and friend,

"F. A. Muhlenberg

"EDWARD G. MCCOLLIN, ESQ."

From Professor Thomas W. Richards

"PHILADELPHIA, April 8, 1899.

"GENTLEMEN,—A quarter of a century ago I first had the pleasure of meeting the Class of '78. It was the third class to enter, for instruction, the then new College building. Many im-

provements and changes for the better have been made since that time, and the marvellous growth and great success attending the University is a matter for sincere congratulation.

"Although the members of your Class, as well as others, have missed some of these recent advantages, it seems to me that you were all profitably employed and have individually improved in after years—that the work that you had to do was well done.

"I am happy to have this opportunity of expressing my recollections of our pleasant intercourse and of thanking you for the courtesy and attention always accorded to me.

"Very truly yours
"T. W. Richards

"To the Class of 1878."

From Doctor Samuel P. Sadtler

"Philadelphia, December 22, 1898.

"My dear Mr. Rowland,—Of the many classes that occupied the chairs of the chemical lecture-room and graduated and passed out into active life during the seventeen years that I was a professor in the University, I know of none that call up pleasanter recollections than the Class of '78.

"As I pick up the catalogue of '77–'78 and look at the names of the Class as constituted during their last year, I can recall, as if seen yesterday, the faces of most of them. This is especially true of those on the scientific side, as they took a fuller course in chemistry extending through several years, so that I saw more of them. The fact that several ladies were also taking

the course in chemistry at this time, attending lectures as well as working in the laboratory, is also recalled as a pleasant recollection of this period. I remember well the interest that attached to that corner of Dr. Genth's laboratory where Miss Peirce and Miss Flanigen had their working places.

"The University in those days had not grown to the dimensions which it has since acquired, and while there was less of the diversified university life, there was more of the distinctive college feature about it. There was less heard about intercollegiate foot-ball and similar sports, and more about the fun within the walls of the old College building. So probably some of your pleasantest recollections centre, as I am sure mine do, about the daily doings in the lecture-rooms, corridors, and assembly-room, about matters which seem trivial to an outsider, but which were full of interest to the several actors and spectators. I was a young professor at that time, not so many years removed from my own college days, and capable of appreciating fully the feelings and interests of an undergraduate. While that was twenty years ago, I can still enjoy, at least, the memory of it when the reminiscent mood overtakes me, as it does those who are growing old, and I hope that other interests and occupations will never entirely blot out those recollections.

"One other word about the Class of '78 and then done. It has been my fortune to have and maintain an acquaintance with many of this Class in their maturer years and to meet them in professional and business life. This is an unfailing source of pleasure to me, and is more than compensation for the trials and tribulations I suffered as teacher in former years.

"Both the former student and the former professor who meet thus in the wider arena of life have probably a more just and fair

appreciation of each other's good points. The professor must admit that the young man he once thought lazy and indifferent has turned out well after all, and the student will perhaps come to believe that the professor is not so absolutely unfair and prejudiced as he once seemed in the days of their class-room associations.

"With the best of wishes for the future of all of the Class of '78, I beg to sign myself

"Yours sincerely

"Louis Sadtler

"W. L. ROWLAND, ESQ.,
"*Class of 1878, University of Pennsylvania.*"

From Dr. Edgar F. Smith

"UNIVERSITY OF PENNSYLVANIA,
"December 21, 1898.

"MY DEAR SIR,—I scarcely know where I should commence in my attempt to write about the Class of '78, for the mere mention of that class calls up a host of the most pleasant memories.

"In the fall of 1876 I began my work as assistant in the Department of Chemistry. The science section of the Class also began its work in the analytical laboratory, and there we first met. I confronted Arthur Church, Ned d'Invilliers, Jack Murphy, 'Mother' Rowland, John Crozer, 'Chiner' Elwell, 'Jase' Norris, Billy Helme, Charlie Rutter, and many others. Being almost of their age, they naturally, upon their first appearance in the laboratory, concluded that I was an addition to the Class, or a

foreigner of some sort, and so told me many rather astonishing things about the various professors; and I can yet see the rather funny expressions upon the countenances of several of them when, after listening quietly to their yarns, I concluded, as the time for work had arrived, to call them to order and to their places. Just what they said I didn't hear, but Jack Murphy and 'Mother' Rowland did the saying, and the class can draw its own inferences. That was the beginning. During the two years in which we worked together only kindness was received by me from every member of the several sections placed in my charge.

"But it was not only the Science men who proved so friendly to me. In the Arts section I found a congenial and brilliant body of young men, broad in their views and an honor to any institutution of learning. Strange as it may seem, I can still see the gigantic razor with which Harry McDowell was presented on Class-day. After that the fuzzy beard was no longer visible. And there recur to me parts of the Class history in which, somewhere, words like the following were delivered: 'I am sure that the very pleasantest remembrances of our College course will cling around the name of Dr. Koenig,'—'kind-hearted, old Freiberg Koenig!' And the doctor never forgot the men of '78.

"It was during these years of your College course that I assisted in the establishment of a chapter of the Phi Kappa Psi fraternity, and drew many of '78's men into the new organization which has existed since in our great University family.

"The men of '78 did excellent work as students, and more than verified, by their later achievements in the broad arena of life's battles, the fondest expectations we entertained for them.

They were manly, true, and faithful, and their subsequent lives have been the same.

"I congratulate the Class upon having attained its majority, and wish for all its members an abundance of prosperity.

"Faithfully yours
"Edgar F Smith

"WM. L. ROWLAND, ESQ.,
"*For Class of '78.*"

From Dr. Robert Ellis Thompson

"CENTRAL HIGH SCHOOL,
"PHILADELPHIA, April 6, 1899.

"MY DEAR FRIEND,—It gratifies me greatly to hear that my old friends in your Class have not forgotten the pleasant relations which existed between us during the four years of our connection as professor and students. I cherish the kindest recollections of the Class, although some members of it stand out much more distinctly in my memory than do others. Who can ever forget Jefferys, the eloquent and aggressive Jerseyman, who stirred Dr. Stillé's bile on that ever memorable morning by declaiming 'John Brown at Gettysburg?' I had a letter from him in Japan the other day, and it was a welcome reminder of as true-hearted a man as lives on this planet. How the Japs take to him is something I would like to know!

"As I look down the list of your Class I seem to be reading a list of my friends of past days. It was a Class which commanded the cordial respect of all its teachers for its propriety

of conduct, its faithfulness to duty, and its ability. From my own experience, I feel you look back upon those four years as among the pleasantest in life, as years in which you got nearer to your fellows than is possible in any other circumstances. If in any measure your teachers contributed to the enjoyment as well as to the profit which gave them character, I am sure we will think it a privilege to have done so.

"I remain with great regard,

"Very truly yours,

"Robt Ellis Thompson."

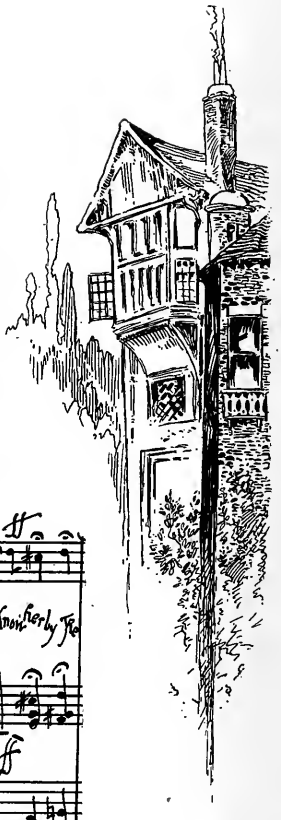
"Mr. Arthur L. Church,

"*Secretary of the Class of 1878,*

"*University of Pennsylvania.*"

The Pennsylvania Girl.

Edward McCollin.



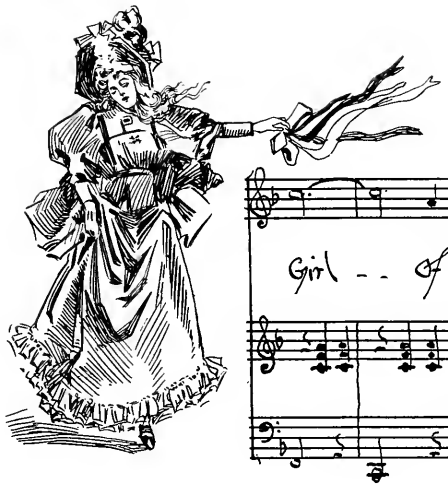
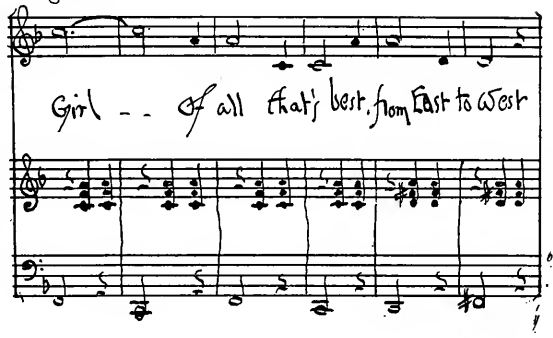
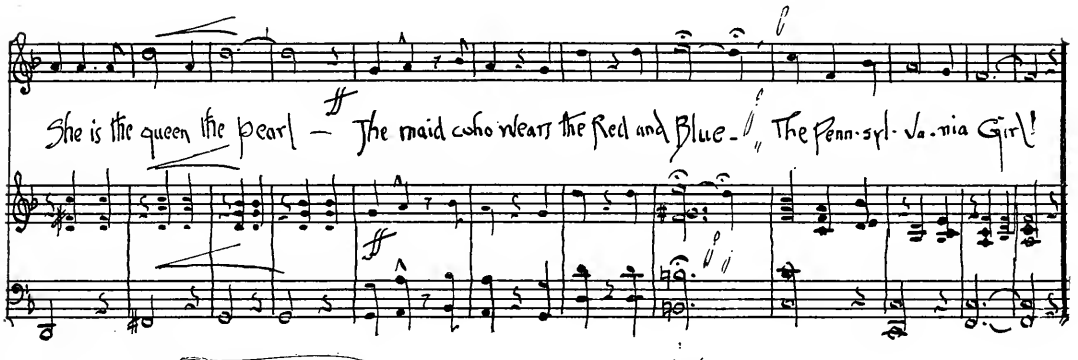
Andante.

If you've es-sayed to find the maid, more dear than all the rest, You'll know her by the Bonnie hair

By all who know her best, You'll tell her by her Bon-ny eye, Her heart, so warm and true, But first of all you'll know her by the

Tempo di Valse.

loy-al Red and Blue! Of all that's best from East to West she is the

queen the pearl - The maid to whom our hearts are true, The Penn-syl-vania



2 One color dyes her laughing eyes, Her lips the other know
And just above her heart there lies, The dainty silken bow
To show while there they rest enshrined, There's one who holds them fast
Through good, through ill, till laurel twined, The colors wave at last —
Of all that's rare, of all that's fair
She is the queen - the pearl
The maid to whom our hearts are true
The Pennsylvania Girl!

3. And so while clear Old Penn
Among her loyal host, from heart to heart shall stand
throughout the land
Shall ring this triple toast —
We'll hail the college undismayed, The fairest flag unfurl, And with them
Pledge the sweetest maid
The Pennsylvania Girl
Though some be fair, yet none compare,
To thee the queen - the pearl!
Forever true our hearts shall be
Dear Pennsylvania Girl!

Words by E.M. Mumford '89

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